

# SUPPLEMENT.

# The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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## Original Correspondence.

### FOREIGN MINING AND METALLURGY.

Profits realised during its last financial year by the Luxembourg Furnaces Company admit of the payment of a dividend at the rate of 10 per cent. per annum. This dividend absorbs 12,000*l.*, and is proposed to carry 28*94*. to the reserve fund. The results of the year would have been more satisfactory but for a combination of unfortunate circumstances, the most grievous of which was the decided rise in the price of combustible. The quality of the coal supplied to the company last year was also very bad. The company has obtained three concessions of minerals in Lorraine, representing together an area of something over 400 acres. These concessions were obtained gratuitously, and they only figure in the receipt-sheet for 62*90*. for expenses of surveys and working. Paris has been very quiet; business has been transacted on a restricted scale. Chilian in bars, delivered at Havre, has made ditto in ingots, 94*1*; tough English, 90*2*; and Corocoro minerals, copper, 93*1* per ton. At Havre copper has continued very quiet; prices have been almost nominal. The Marseilles copper market remained quiet and without change; Spanish in plates has made 2*1* per ton. In Germany transactions in copper have been quiet, having been confined to the requirements of consumption; purchasers have only bought when they have been compelled to do so. There has been a tolerable amount of firmness in copper at Paris, transactions have not been very important. Banca, delivered at Havre or Paris, has brought 130*l.*; Straits ditto, 130*l.*; and English, delivered at Havre or Rouen, 129*l.* per ton. At Marseilles tin, after experiencing a rather important fall, has regained firmness; Banca has been quoted at 13*4* per ton. In Holland there has been comparatively little passing in tin, and prices have been tending downwards. At Amsterdam, Banca has been offered at 72*fl.* without buyers. The Rotterdam market, after having displayed a strong tendency, has closed quietly; disposable Banca has ranged 72*fl.* to 73*fl.*, and from 73*fl.* to 73*fl.*, with delivery at the early sale. Billiton has been quoted at 70*fl.* to 73*fl.* A quiet has prevailed upon the German tin markets, and prices have materially varied. Lead has been firm at Paris; French, delivered at Paris, has made 2*4* per ton. Lead has been advancing at Rotterdam, and the German lead markets have all exhibited firmness. Zinc has presented little change.

The number of ironworks which are in an idle condition is considerable in France, and the reaction is making itself felt in the French districts. Stocks of industrial coal are being formed, and the general tendency appears to be seriously downwards. In the Nord consumers have supplied their requirements for the winter, very few among them have shown a desire to make purchases. Deliveries extending beyond next February, a date which they think will certainly bring with it a reduction in prices, proprietors of some collieries propose contracts to be executed 6*1* at 1*s.* 8*d.*, and even 2*s.* 6*d.* per ton below present rates. At the domestic coal trade has experienced a check; at the La Seille dépôt, and at the Aubervilliers general warehouses, there important stocks, and lower rates are reported than last influenza. The Carmaux Mines Company commenced the payment, on day, of an interim dividend at the rate of 1*l.* 4*s.* per share for year 1873.

The extinction of no more furnaces is noted in France, but that is what can be said. Retail traders and railway companies require inexorably that whatever may be the financial and political condition of the country they must have it. This is what has now opened, and this has given a certain temporary animation to the nation, so that quotations for iron present rather more firmness, great rail works have some important orders to execute for the various railway companies. Upon the Paris market the state of affairs has presented no variation; a revival in business has been retarded by the course of political events, which has, naturally, created some uneasiness.

marked slackening is noted in the demand for coal in Belgium, considerable quantities are being warehoused. A fresh revival is anticipated on the advent of the first frosts, but meanwhile stocks are being formed, and colliery proprietors are making it advisable to attract clients by making some concessions, especially as regards long-termed contracts. There seems to be generally little confidence as regards the future; on the contrary, there impression that the present feverish state of affairs is drawing to a close. Arrivals of English and German coal into Belgium continue to take place with activity. The quality of the Belgian coal is at present supplied in complained of in some instances, although it ought to be good, considering the price charged for it. Varies of coal by navigations have been increasing recently; this attributed partly to a want of trucks, but hitherto it cannot be that trucks have made default to much extent. At Charleroi Mons quotations have been supported at about their former level.

In the Liège basin there are said to be scarcely any stocks of trial coal, and all the great colliery proprietors have their position engaged from the present date until March, 1874. A fall, however, is anticipated in prices next spring, in consequence of the dearth in the iron trade. Quotations would, probably, give way at first for the diminution which has taken place in the extractive great attention being temporarily directed to preparatory works. The Charleroi United Collieries Company has been paying a dividend of 4*l.* per share.

A slight return to animation which has characterised the English trade does not appear to have found any appreciable sales in sum; at any rate, no sensible revival has taken place in affairs, only meets with a sluggish sale, and the blast-furnaces which remained in activity find their stocks increasing, notwithstanding the general decrease which has taken place in the production of new establishments having blown out some of their blast-furnaces. Refining pig, hard iron, is quoted at 4*l.* to 4*l.* 8*s.*; some transactions which have taken place in casting pig have been made at prices ranging between 5*l.* 12*s.* and 6*l.* per ton. The iron of merchants' iron is not much better, quotations have made 1*l.* 10*s.* per ton, but purchasers do not present themselves upon terms, and some works which have done business at 1*l.* 10*s.* per ton have not been able by this useless sacrifice to create a regular state of affairs. Rails have been in a little more demand, the

works do not accept present rates very readily, except as regards important transactions. A revival in affairs is looked for, and perhaps not without reason. The enquiry for plates has been more active, although prices have fallen. The foreign demand for Belgian iron is very feeble for the present; both Germany and France are taking very little, and no serious revival in the external demand is likely to be witnessed until coal has fallen. The Association of Engineers, educated at the Liège School, has held its annual general meeting this week at Brussels, under the presidency of M. Trasender. The Gilly Forges Ironworks and Foundries Company will pay a dividend of 2*l.* per share for 1872-3 on Dec. 31.

### MINING IN UTAH—THE EMMA MINE.

SIR.—In the Journal of Sept. 27 a certain Mr. Paffard, some sort of a clerk I believe, and the *soi-disant* historian of the Emma Mine, takes exception to my remarks regarding the Emma and Flagstaff Mines in my communication upon the Cottonwoods, and insinuates that I have asserted what I cannot substantiate, and that I am not qualified to give an unbiased opinion on the matter. It is generally against my principles to take notice of any indirect attacks upon my professional character or qualifications. Mr. Paffard acknowledges that he speaks from hearsay only; if he had spoken from personal knowledge I might have deigned to notice his remarks, as it is I really cannot condescend to answer them. And should I repeat all that I am told of Mr. Paffard's qualifications for giving an opinion upon the subject I should be obliged to employ much stronger language than I care about using in regard to a perfect stranger to myself. As for the opinion of "one of our most experienced mining engineers," I will give it the same consideration that I do Mr. Paffard's, until he gives his name, and upon what knowledge he bases that opinion. If personal, I might condescend to reply; if only hearsay, I treat it as it deserves.

I am not in the habit of giving "authority" for, or corroboratory evidence of, the statements contained in my correspondence, as they are based upon personal observation, or gathered from the most authentic sources, and I alone am responsible for them. But I will deviate for once from my established rule, not for the satisfaction of Mr. Paffard, nor to attempt to convince the shareholders of the Emma that the opinion of a person who is totally ignorant of the subject is superior to that of an experienced professional who is on the spot, and who has every facility for obtaining the most reliable information, independent of his personal knowledge, but simply to show that Mr. Paffard writes upon a matter of which he absolutely knows nothing. In fact, his ignorance is so palpable that his communication is barely worthy of notice. One instance of his ignorance will suffice. In the opening sentence of his pamphlet he says the Emma Mine is situated in Little Cottonwood Canyon, &c., "about 16 miles from the branch of the Union Pacific Railroad, a station called Sandy being the nearest to the mine." In the first place, there are no "branch roads" on the Union Pacific Railroad; and secondly, Cottonwood is some 65 miles from the nearest point on this road, the junction of the Union and Central Pacific Railroad being Ogden, 42 miles from Salt Lake City. This is a specimen of his statements. The other statement contained in the same paragraph in regard to the naming of the mine is entirely beneath the notice of any gentleman. Is it a wonder that nobody comes forward to disprove any assertion contained in this pamphlet. Verily, let it sink back into the obscurity from which it emanated. I again assert that there is no good reason for presuming that the real value of these two mines has depreciated in the least. By this I do not mean that the mines are absolutely worth the amount of cash capital for which they are stocked, neither have I ever given an approximate value of either mine. I simply repeat what I asserted in that communication, that facts lately ascertained warranted the belief that the Emma is as valuable as it ever was, and to say that it never was of any value is a piece of presumption that cannot be sustained by past experience. I also repeat that it is an absurd rumour that the Emma was virtually worked out when placed upon the London market, notwithstanding the specific statement of Mr. W. Eddy, jun., to the contrary. Mr. Eddy was only a common miner, employed by the day, and who was neither a geologist nor a mining expert. And as regards this statement I have only to ask what value could be placed upon the opinion of any man who "knew that the mine was worked out," and yet who could keep silence for two years and permit his countrymen to pay such an enormous sum for a worthless property? It is obvious what his specific statement is worth.

From official statistics which do not come under the observation of Mr. Paffard, I find that the Emma has shipped on an average about 130 tons of ore weekly during the past season, some of it being of a very high grade, assaying in silver over \$2000 per ton. At the very lowest average \$100 per ton, this would be \$13,000 per week. Any mine yielding this amount even in the gross, which is a very low calculation, cannot by any means be said to be played out. Mr. Paffard does not controvert my statement that the mine yielded \$1,000,000 worth of ore in the year 1872, and admits that it has been in possession of the present company during that time. I need not make any further comment upon the consistency of his remarks as regard the mine being "played out." And if Mr. Paffard has not yet learned to judge by the law of comparison he had better abandon the rudiments of Latin, and study practical life.

Mr. Paffard allows that there has been 50,000*l.* profit out of the Emma, "leaving out the Illinois Tunnel," during the past 20 months, but gives this as a proof that the mine is not what it was represented to be. Represented to be by whom? Anyone who had not read my articles would think that I had represented the mine to be worth the capital of 1,000,000*l.*, or some other enormous sum. If I wished to engage in a controversy with Mr. Paffard I would request him to prove this; as it is, I simply give his insinuation the lie direct. I agree with Mr. Paffard that 50,000*l.* profit in 20 months is not very large for a capital of 1,000,000*l.*, and in this connection I will again repeat what I have so frequently stated in my correspondence, that it is not any evidence that the mine is worthless if it cannot pay a dividend on a sum perhaps five times its real value. If English capitalists will persist in stocking mines in this reckless and absurd manner they must not complain at not receiving a large or even a moderate dividend. Taking Mr. Paffard's estimate of 30,000*l.* in 20 months, with the Illinois Tunnel paid for, this would be 1*l* per cent. per month, which is a good profit on a capital of

100,000*l.*, and this is a fair price to pay for any ordinary mine. The Emma produced 200,000*l.* worth of ore in 1872, and if a company cannot make a good profit out of this amount it is evident that there must be some fault in the management. And as I have frequently stated before, when a company prosecutes labour without either economy or foresight, but are extravagant or reckless in expenditure, large profits need not be expected, for they will not be obtained. And if Mr. Paffard has again a "little money to spare," I will advise him to purchase one or two shares in a company that is not so heavily stocked, or he will be obliged to make a second endeavour to retrieve his fallen fortunes by writing another pamphlet. But I will here inform Mr. Paffard and the British public generally that it is perfectly understood on this side what has been the object of bearing the shares of the Emma, and that in this connection Mr. Paffard has placed himself in an enviable position. It looks very much as if Mr. Paffard had some other object in view than merely to try and get redress for the loss of the paltry sum which he originally invested, and people here who have read his pamphlet do not hesitate to say that it was written with some ulterior motive, and they wonder how many shares Mr. Paffard has been promised for his services when certain "clever" parties obtain control of the majority of the shares. It will not be very long before developments will take place which will astonish the former shareholders of the Emma, and make them regret that they were weak enough to be influenced by parties having the same object in view as Mr. Paffard. I have before written upon this subject of "bearing" stock, and the motives for so doing, and have warned the British public not to be misled by unscrupulous speculators who were acting in defiance of all business honour and rectitude. A subsequent communication may contain more upon this subject.

In conclusion, I will state that I have neither time nor inclination to enter into any controversy with Mr. Paffard. I have not the slightest interest in the mine, and I have had no other object than to give the English public reliable information, and make them familiar with facts as they exist here in regard to mining matters in general, and that from an impartial stand-point. And in a long course of professional experience I have always found the best rule to be the code of honour, consequently I decline entering into any argument with a person who has not the slightest knowledge of what he presumes to criticise. According to Mr. Paffard's own avowal in his pamphlet other gentlemen permit him to write six letters without any notice being taken of his communications, henceforth I shall permit him to do the same.

B. A. M. FROISETH, U. S. Surveys.

Salt Lake City, Utah, Oct. 15.

### COPPER MINING ON LAKE SUPERIOR.

SIR.—Mining in Houghton and Keweenaw counties is very lively, and in many instances profitable. Huron Mine, which went down in a very large indebtedness some four or five years ago, was taken hold of by its creditors. Most of them are practical men, and by great economy and good judgment the concern is now doing well, under the name of the Houghton Mining Company, working some 300 men. About the same state of affairs applies to the South Pewabic, now the Atlantic. They have three heads of Ball's stamps, which, if properly attended to, will stamp 100 tons each in 24 hours. Their product is now about 90 tons, of 75 per cent. of mineral, a month. Quincey Mine keeps up 120 to 130 tons a month, and paying regular dividends. Pewabic and Franklin are leased to a Capt. R. Uren, to work on shares or tribute, and by prudent management he is making a little fortune pretty fast.

Boston and Albany is working for the fifth time. When copper was low they could not make it pay, but now I presume it will answer. Generally copper here is 19 to 21 cents, but now it stands from 25 to 26 cents. Calumet and Hecla Consolidated borders on 1100 tons a month, of 83 per cent., dry weight, and looking if possible better than ever; it is down about 1200 feet from surface. Immediately south, on same lode, is a mine started with excellent appearances, and great excitement is on foot. Great expectations are entertained that it will be Calumet and Hecla No. 2. Immediately north, and on same lode, is the Scholearcraft, and notwithstanding the company has furnished everything that is considered necessary, and have opened 600 feet in depth and 1100 or 1200 feet in length, under the able management of Capt. Johnson Vivian, formerly of Camborne. It has failed to come up to a paying point. They are, however, still trying, and I believe they are about to sink another lift anyhow. Attempts have been made to foster the idea that there is room to censure the management. This, you know, is often the case when a mine does not yield to expectations, but this company are practical men, who well know they have a practical man at the helm, fully able for his post. The Old Cliff is looking remarkably well. In the back of the 157 fm. level they have one of the old-fashioned masses, from 75 to 100 tons, and other points are looking exceedingly well.—Oct. 15.

A MINER.

ROCK-BORING MACHINES.

SIR.—Allow me to thank Sir George William Denys for his frank, manly, and courteous letter which appeared in last week's Journal. In reply to his former paper, I examined his statements respecting the quantity of work done by his McKean Boring Machine. He has been good enough to furnish us with additional data, from which we may again compare the results arrived at by machine labour and hand labour. I will this time examine the latter, when we shall be able, to some extent, to estimate the value of both as advanced by him. We cannot know the weight of what is placed in a scale until we know the weights which are placed to balance it in the opposite scale.

Sir George William Denys says that they have at present a forehand going in an adjoining mine to the one in which the forehand is being driven by the McKean drill. From the fact that this hand-labour forehand is said to be in an adjoining mine, and that the machine-labour forehand is said to be a much worse place to drive, I shall assume that the hand-labour forehand is in similar strata to that found in the machine-labour forehand, and consequently that the same amount of boring and blasting in the hand-labour forehand would accomplish as much work as if done in the machine-labour forehand. The fact of its having been let for 2*l.* per fathom cheaper than the price named for hand labour in the machine-labour fore-



ting old sheep in order, to work it for tin also. If he finds tin there, surely Capt. Jack will not put in a claim, as he had it in hand for about 20 years, and found no tin. Then, I know no one in all the Callington district that can put in a claim but the Doctor; I hear he thinks of putting in a claim as having opened more mines than any man in England; I am not aware he is about to enumerate the paying mines he found. I know of no other one in the Callington district. Then comes the Liskeard district; I know no one there. Then comes St. Austell district; there are one or two would-be experts in that district, who make a noise, and pretend to teach mining, but I never knew them to publish a single account of what they have lost on their mines. I venture to ask if it amounts to 100,000? Had they paid a small dividend on one the Journal would have been called on to publish it. I am not inclined to think St. Austell district will produce a claimant. Then we are brought down to the Redruth district—in fact, to Truro and Hayle—and how many men will put in a claim there I know not. I recently asked a man that I am on the best of terms with, and he stands A1 (he has been an agent a number of years, and has many mines now at work), if ever he found a mine that paid outlay and interest of money spent, when he expected to find one, and if he could find as many paying mine agents in Devon and Cornwall as he has fingers and thumbs that found such paying mines? I have not got his answer yet. In that case, it does not say much in favour of our more recent agents' system of deep sinking, neither does it for their knowledge of where to work to find a good mine; neither does it prove they are men that should be called in to report on mines, as I am confident that Mr. Williams found more paying mines than all the lot now living. I do not consider that men who have been agents in paying mines should be ranked as mine finders, as I have known many drones become agents of good mines. But these are only fit as reporters for such men as the lounger catches. A man who ventures largely in mines should learn to know a good gossan, and go and see for himself that the lodes are well laid open; then, if he knows a gossan, and can see a large mass—not a wheelbarrow full, but cartloads—he stands a fair chance for his money, even if he knows nothing else of mining but seeing the accounts are all correctly kept.

I next ask a few useful questions, that all mining men should be able to answer:—1. Which way do ores dip generally in lode, east or west? They have but one general law of dip; the contrary shift is by other means, I might say from contra shifts of other courses, such as slides or floors. These shifts of lodes often throw the dip the wrong way, to all appearance, but they come right again.—2. Why are lodes most productive near junctions?—3. Is not the earth in constant motion through atoms passing on? Which way do they pass on? Is polarity the attraction, or does electricity pass them on, and give them the vital spark, as required?—4. Are electricity and atoms ever running the same way in lodes, or do they change, much as the tide ebbs and flows?—5. What is the acting acid that dissolves the lodes and rocks into atoms again, to be regenerated and newly formed?—6. What gas do large lodes fully charged with yellow copper produce? What among the substances take the most active part?—7. What gas will a lode produce when charged with silica, alumina, iron, mica, sulphur, arsenic, and lime? Who will name its then compound? Is it an explosive gas?—8. What should be the contents of the stratum and lode or lodes to produce heat in mines?—9. What to produce cold gas in a mine?—10. What gas is produced in a long deep granite level, with no lode in it? If any gas, is it hot or cold? We all know coals produce a hot explosive gas.—11. What three things that were formed at the Creation never propagate, and are self-healing and repairing?—12. What is the shortest live that was created?—13. In what do clay-slate and granite differ?—14. In what do copper-bearing clay-slate and lead-bearing clay-slate differ? All worth knowing to the practical miner, and he must learn it if he would keep pace with the Cornish farmer.—*Wadebridge, Nov. 4.*

N. ENNOR.

#### PRACTICAL MINING—SUGGESTIONS TO MINE AGENTS.

SIR.—I have read with some interest the different articles written by Mr. Ennor purporting to give practical suggestions to mine agents, and after a careful perusal of them I have failed to perceive their value, but on the contrary consider them a gross insult to the mine agents of Devon and Cornwall. Indeed, it appears to me that the articles are written more for the purpose of "bulling" or "bearing" certain mines than to give any practical information. Last week Devon Great Consols was attacked, and this week, no doubt, it will be some other mine. Then, too, Mr. Ennor makes such absurd digressions about trees, plants, shrubs, and farming which make his articles quite a muddle. What these things have to do with practical mining, even for high-drawn illustration, I have yet to learn? Mr. Ennor refers to his past connection with Drake Walls, but did not at the same time say that this mine was so notoriously badly killed out that more men were killed in it than any other mine in Cornwall.

I would advise Mr. Ennor before he classifies all mine agents as fools (except himself) to let them know how many dividend-paying mines he has laid out, and how long they continued dividend-paying; and as egotism seems to be one of the gentleman's failings, if he has anything to say on this head I would listen to him to the "top of his bent;" and I have no doubt, should his explanations be satisfactory, that he will have many mine agents that will be more inclined to follow him than they are at present. At the same time he may also as well say how many non-dividend paying mines he has laid out. Why Mr. Ennor asks so many questions without supplying answers I cannot tell, unless for the sake of information; but I think it would suit his character of mentor better if he would supply the answers as well as the questions. But I much doubt if he or anyone else can answer them. Does Mr. Ennor want to puff Dolecroft or Tincroft, or is his object to have a side chop at Messrs. Taylor, who are greater mining authorities than Mr. Ennor ever can be? I should like to know what wages were paid at Drake Walls during the time Mr. Ennor had the mine, also the price of coal, and what state the mine was in when he left it? for it must be remembered that present profit is often made at the cost of future loss. Bad timbering and temporary work often take months to repair, and the man who follows a dividend-paying man often finds the mine in such a state as to require months of dead work to get it into working order.

Mr. Ennor would do more justice to mine agents and to mine speculators if he would tell them the reason why deep sinking does not pay, and point out the way to make it pay. I will, however, endeavour to do so.

#### REASONS WHY DEEP SINKING DOES NOT PAY.

1.—Excessive dues paid to the lord. In the two counties of Devon and Cornwall there are often more royalties paid to the lords than the shareholders get in dividends. It is no uncommon thing for a mine to be paying 100/- per acre land damage when the land for agricultural purposes is not worth more than 30/- freehold. Then there is 5/- or 10/- per acre yearly rental, and 1-16th or 1-20th dues.

2.—The high price of coal, machinery, and labour. These items have nearly doubled within a very few years.

3.—The amount of cash and shares that are paid to the brokers and directors. This money is very often paid before the mine is worked, and it often happens that a company with a very large nominal capital has not one-half sufficient cash to do what they propose, and what is stated in the prospectus. Then, the salaries paid the London management are often half as much as the mine cost. Then when the mine is knocked, as it must be, the brokers and secretary try and throw all the blame on the mine agents.

#### NOW FOR THE REMEDIES.

1.—To pay nothing to the lords but the actual freehold value of the land with no rental. To pay the dues on the profits.

2.—To reduce the expenditure on coal as much as possible, by substituting better boilers and better engines than are at present used in the two counties, and substitute machinery for hand-labour. The McKeon or Burleigh Drill would in many cases considerably reduce this item.

3.—To use a higher kind of explosive agent, as guncotton, dynamite, or lithofracteur.

4.—To be careful before investing in a mine to see that it is not weighted with a cash price beyond its value, as a mine is very often

ruined by being sold at too high a price, and the money so spent is taken away from being invested in tools, machinery, &c.

And now for a word in defence of the mine agents of Devon and Cornwall. I must again differ entirely from Mr. Ennor, for I think these men are second to none in the United Kingdom. I am only sorry that they have no better champion to defend them from the aspersions cast upon their ability and probity. I have myself associated greatly with them, and can confidently say that there are no men who know their duty better, and more constantly study the different improvements that apply to their business. As a body I believe them to be unimpeachable. I grant there are a few black sheep amongst them, and I should be glad to know in what body of men there are not. I do not think Mr. Ennor's opinion with regard to 100 fathoms being the maximum depth for a good tin lode will be endorsed by even a minority of Cornish miners; besides, it is well known that good tin lodes are found at greater depths than this, and as two periods are lost and part of the third, what in one place may be 100 fathoms may in another be 600 fathoms.

I should like to have more of Mr. Ennor's ideas concerning tin being formed from oxide. Will the gentleman tell me if he considers that rust was formed before iron? If Mr. Ennor will give his views without attacking special mines or men he would carry more weight with real miners, but as long as he selects individuals or individual mines to illustrate his old-world ideas people will know what importance to attach to his theories. I see also that this gentleman is going to find a nest of young mines in the county. Are they for the market? or is the great Philanthropist going to hand them over to a longing public?

I know some dozens of mines in the county, but am certain that neither he nor anyone else can tell what they are likely to be by surface scratching. Money must be spent on them, and some depth attained, before it can be told what they are like. The days of the divining rod are past, even in a county that contains only one diviner.

*Devonshire, Nov. 4.*

A MINER.

floors lumps of pure lead ore as large as my fist. The mine is so situated that there is a plentiful supply of water to work all the machinery, so that coal, the use of which now-a-days is the curse of mining speculation, is not required, and the mine can be worked in the most inexpensive manner. Truly, such a mine as this ought not to be allowed to remain unworked; but there it is at a standstill, and capitalists investing their money in worthless concerns in Cornwall and North Wales which have not for years paid a dividend, and which have not the slightest chance of ever doing so.

C. A. MOREING.

#### MINING IN THE LLANRWST DISTRICT.

SIR.—Some little time since you were good enough to publish, at my request, in the *Mining Journal* a series of letters on "Mining in North Wales, and its Prospects." My object in writing those letters was to direct the attention of some of your numerous readers to what I considered a good, but much abused and unjustly neglected, district. I wrote decidedly in the interest of Welsh mining, and, perchance, of that intention, in the interest of Welshmen. In one of those letters I stated incidentally that granite was found at Trefriw, a village about 2½ or 3 miles from the Llanrwst Lead Mines. I also stated that fossiliferous plants were found at the mines, and gave it as my opinion, from certain reasons which I stated, that they belonged to the Devonian period, and I now add that I alone am responsible for that opinion. The other statement objected to by "Cymro" and "Mr. Kenrie"—namely, that granite was found at Trefriw—I am indebted to Mr. R. T. Rogers, one of the most respectable and respected citizens of that place; and he again, without making any pretence to a knowledge of geological science, showed in a printed document the source whence his information was derived. This was contained in a report upon the ground in question prepared by Mr. William Roberts, a gentleman, if I remember correctly, of some place in Carnarvonshire, and who is reported to have had considerable experience as an expert in this and other parts of Wales. Personally, I can neither confirm or deny his statement, as I have never been to Trefriw, and it certainly did not occur to me to question the knowledge or veracity of that gentleman upon a matter so trivial as the identification of granite, and I still think it is quite as likely he was right in that statement as either of those gentlemen who have disputed it, perhaps neither of whom is aware that more than one kind of granite exists, independent of mica. But, be this as it may, and after reading the letter of Mr. John Kenrie in the Supplement of last week's Journal, I may be excused for saying that if judgment were to proceed from that display of geological knowledge—or rather its *converse*—he will not be credited in the estimation of your readers generally with being much of an authority upon such matters. He commenced his letter by saying he had known the district in which the Llanrwst Lead Mines are situated for many years, and that "he always understood that the geological position of the rocks in the district underlay the fossiliferous," and in the concluding part of the same paragraph he states "he always considered" the rock formation of the district to "belong to the Lower Silurian System." It is quite natural that I should now ask him if he considers the Lower Silurian to have preceded the age of fossils? Strange ideas one meets with in this strange country of Wales. But, to proceed, these gentlemen affect very much surprise at my saying fossil plants, of even any period, were found here. I, in my turn, am surprised that anyone pretending to the slightest knowledge of geology could possibly walk over these hills and roads by the light of day and not notice them. There is here the most extensive arborescence I have ever seen, and in most beautiful and striking outline. To afford you some better information on the subject than I can possibly convey by writing, I will send you, by London and North-Western Railway, a few specimens of the fossil plants I refer to.

I was well aware the time I made the statement regarding the fossils, which, if we may judge by the ordinary tenor of language, produced a sensation in the minds of these local savants of geological science, that I was opposing myself to popular views on the subject; indeed, I said as much. But if there were no popular errors, one might hesitate to commit himself at any time to new theories. But my presumption was accelerated, if not confirmed, by a variety of considerations, the principal of which was the occurrence of grauwacke, accompanied by a highly siliceous rock, which seems to have been formed from the infiltration of vegetable matter, added to which must be the occurrence of red conglomerate, which is found here in close proximity to the other (above-named) rocks. But for these considerations, the abounding arborescence which is so extensively met with here would, in all probability, have induced me to believe that this particular section of ground was in close proximity to, if it did not actually belong to, the carboniferous period. Perhaps your St. Asaph correspondent will be kind enough to inform us what becomes of the carbon when vegetable matter, instead of being changed into coal, is silicified, and to what extent carbon may be a constituent of slate rocks, either in the shape of coals or siliceous petrifactions. And if he recognises any other mineralising agent for carbon besides sulphur and silica acid; or in what form other than carbonic acid it may be dissipated from its containing rocks; and whether carbon has ever been found in appreciable quantities in the Sower Silurian rocks, either in the Cambrian or Cumbrian divisions. Carbon is condensed from vapours in these mines like lampblack, covering every flat surface, especially those which have sufficient moisture to constitute a menstruum to condense the current vapours; and what conditions, whether aerial or aqueous, he considers to be necessary to decompose carbonic acid, to liberate the oxygen and assimilate the carbon. The gentleman admits, as if it were a peculiar case, and he was making a liberal concession to acknowledge it, that igneous rocks occur at Trefriw, but says nothing of the igneous rocks which occur at these mines. Perhaps these also are regarded by him as belonging to the Lower Silurian system, which, in his category, "underlies the fossiliferous." It appears to me that Mr. Kenrie has undertaken voluntarily to champion "Cymro's" cause with much less knowledge, but greater conceit, than that gentleman displayed.—*Llanrwst, Nov. 4.*

ROBERT KNAPP.

#### THE PROSPECTS OF CORNISH TIN MINING.

SIR.—Who dare to state that Cornish Tin Mining is under a cloud, or that the public fail to recognise the merits of mines possessing minerals in paying quantities? We have noticed with satisfaction the graphic remarks and practical suggestions contained in Mr. N. Ennor's letters, published from time to time in your valuable Journal, and we think with him that four-fifths of the schemes and deep mines at work and foisted upon the public notice had better be shut up and abandoned. Then we should have workmen in abundance, skilled and practical miners (through competition), and better prices for our products. There are hundreds of mines said to exist and at work in Cornwall that produce from nothing up to 5, 10, 20, and 50 per cent. of minerals against costs of working that never have, nor never will, pay the adventurers a single farthing; yet they contribute to the vested interests of Cornwall—i.e., landlords, merchants, manufacturers of machinery, bankers, lawyers, tradesmen, captains, clerks, and higher wages to workmen, for not only is the whole product but also the calls made spent in Cornwall, and tend to swell the money sunk in promoting the vested interests of the county, and without one single atom of gain to the outside shareholders.

We do not for one moment object to progressive mines, nor would we stop indiscriminately all deep and non-dividend concerns, for from the former spring the prizes that fascinate the public, while they encourage the enterprising in the development of the hidden wealth that at times return the earnest and studious miner tenfold—nay, in many instances a hundredfold—his outlay; but these deposits of wealth can be discerned by the known and unerring laws of Nature; these are as perceptible in veins and lodes, strata, and east and west electric channels and currents, as they are in the magnetic influences of north and south cross-currents, slides, heaves, junctions of lodes, elvans, different strata, ironstones, and the existence of gossans, quartz, decomposed and crystallised spar, granite, clay-slate, and numerous other phenomena in connection with mineral wealth in veins, sufficient in quantity and quality to remunerate the miner for his expenditure in money and time. These guiding lines of Nature's laws are well known to practical authorities, yet the mass

#### MINING IN PEMBROKE AND CARMARTHEN.

SIR.—Having spent some time in these counties, and had plenty of opportunities to see the various mines and lodes, I cannot help expressing my regret that mining is so much neglected in this part of Wales. The greater part of Pembroke and Carmarthen consists of what is known among geologists as the clay-slate group of the metamorphic system, and among Cornish miners as the killas. The strata are generally very much thrown up by trap rocks. It is a well-known fact that these primary formations are the great metalliferous rocks of the world. Nature having had the longest time to elaborate these minerals from the solutions continually percolating through their fissures. The number of lodes traversing this part of Wales is quite marvellous. They are to be found everywhere. A railway that has recently been made from Whitland to Cardigan Road has cut through the backs of at least a dozen, all rich in gossan, and having every appearance of containing lead and copper in depth. The only mine that has been extensively worked is at Llanfryncach, and has given large quantities of silver-lead. This mine was very much damaged by mismanagement a few years ago, but, under the present vigorous direction of Capt. Roberts, seems likely to give as much more lead as it ever has. Not far distant from Llanfryncach is Trelech Mine, one of the richest lead mines, I think, that it is possible to meet with. It has, however, like many others, been very unfortunate in its management. The first company that started it, with an outlay of 3000£, raised 11,000£ worth of lead ore. Some dispute then arose among the adventurers, and the miners were left without being paid, whereupon they summoned the company, and a bailiff sold all the machinery off the mine to pay the wages. Since this the mine has not been worked. I visited it a short time ago with an intelligent miner who had been working there, and he told me that the main lode had not been cut, all the lead that had been raised was taken from branches. I picked up on the old dressing

Nov. 8, 1873.

of public investors ignore the advice of those who know how to and would guide them aright for the glowing prospects of fashionable schemes, advocated by market concoctors, who are as ignorant of practical mining and the unerring laws of Nature as the practicals in Cornwall are of prospectuses, and the scheming adopted by market share operators in drawing a too confiding public into worthless concerns and abortive mining schemes.

There cannot be much difficulty in selecting 20 sound progressive Cornish tin mines that will do the investor good, and require only time and practical development to become great and remunerative properties. Among these we select the following for the guidance of the uninitiated:—Balmythe Tin Mining Company (Limited), fully paid up, St. Agnes Consols, New Great Consols, South Toccarne, South Condurrow, The Lovell, West Bassett, East Bassett, West Tolgas, Wheal Agar, New Dolcoath, East Balleswidden, Penstruthal, South Carn Brea, and South Crofty. All of these mines differ in merits, and possess distinct features of attraction, which space precludes us from particularising, yet investors can receive every information, data, and intelligence upon application, either by post or personal attendance, at our offices (by appointment, 12 to 3 o'clock).

Mr. Ennor was correct when he remarked that Crenver and Abraham, Great Vor, and Great Alfred were the flowers of the county when worked above the 100, but have done no good in their re-workings to shareholders, and we might have added East Crinnis and Penbroke, Great Crinnis, Great Wheal Busy, and Pen-an-drea. These were good mines in former times, and from the surface down to the 100, yet combined there has been a loss of fully a million sterling, and no good effected, otherwise than adding to the wealth of the vested interests of Cornwall. In these mines the shareholders not only lost all their money, but had to pay heavy dues to the landlords for the privilege of throwing it away! The landlords of Cornwall alone should open such mines as those to which we refer, and instead of paying royalties the landlords should pay 25 per cent. of the costs of unwatering such sinks for superfluous capital before any body of capitalists co-operated with them. No mine in Cornwall should pay dues until the capital expended is returned to shareholders, and the renewal of leases should be compulsory instead of optional on the part of landlords.

It must be admitted that the tin mines of Cornwall continue to pay good dividends, notwithstanding the high prices of fuel, and consequently advanced costs of machinery and materials. The labour market also presents features of interest as regards the future. The stoppage of several deep and extensive mines lessens the volume of employment, hence miners must find occupation, and thus the supply of hands is increased, and the independence of the workmen have received a necessary and salutary check. At Dolcoath the deeper levels (two-fifths of a mile in depth) are discovering large bodies of ore, while no sign of even approaching exhaustion is discernible. The dividend for the past quarter was 214s., or just 12 3-16th per cent. on the tin ores sold, 17,530*t*. The various points are valued at 1*t*., 20*t*., 50*t*., 80*t*., 150*t*., and 200*t*. per fathom. It seems to us extraordinary that this "gem" should have to sell 100*t*. of black tin annually, worth at the present price 70,276*l*, in order to secure dividends of 859*l*. Tincroft, adjoining, declared for the quarter a dividend of 6000*l*., although the sales of tin were only 13,650*t*, the actual gains being 500*t*., or 44 per cent. on the products. Carn Brea, to the east, yielded 10,80*t*. for the quarter, and made a profit of 1094*l*. This mine is not so deep as Dolcoath by 80 to 100 fms., yet it sells for 68,000*l*., against 270,000*l*. for Tincroft, and 215,000*l*. for Dolcoath. The gains for the past quarter on the market value were respectively 1 3-10ths, 2 2-10ths, and 1 1-50ths per cent. Hence these mines sell for the fabulous sums of 17,11*t*, and 25 years purchase. Under these circumstances, who can complain of the favourable recognition of Cornish tin mining. The bonds of the Turkish Government give investors 11 per cent.; Italian, 8 to 10 per cent.; Egyptian, 10 per cent.; and other foreign countries from 5 up to 6, 8, and 10 to 12 per cent. Why, Dolcoath must be good 25 years hence as it is now, and keep up the dividends being paid at this date over the whole interval, to yield purchasers 4 per cent. interest and preserve their capital.

We may here remark that Tincroft and Carn Brea are the only old mines resuscitated after suspension of the workings, at present paying dividends, and these were comparatively shallow mines when reopened. We question greatly whether Dolcoath would be worth reopening were the workings once deluged with water. Mr. Ennor is perfectly correct in stating that there are numerous valuable shallow and un-discovered mines in Cornwall, and it is to these that we must look for prosperity and success. The setting of the sun has involved in utter darkness the deep abandoned mines of the past. It is to the stars that illuminate the darkness of night that the horizon becomes bright, and it is only through the application of practical skill, aided by science and an earnest study of Nature's laws, that the mineral wealth of the hidden chambers of productive veins or lodes can become detected, developed, and rendered profitable.

#### TREDNICK AND CO.

Mining Engineers, and Dealers in Stocks and Shares, 32, Fleet-street, Nov. 4.

#### ENGLISH MINING—ITS PRESENT AND FUTURE.

SIR,—Noticing in the Journal of the 1st inst. that your correspondent, "Observer," doubts the existence of copper mines producing 6 ozs. of silver to the ton of stuff broken from the lodes, I beg to inform him that the Great Belstone copper lode, which is over 100 feet wide, and has been described by Capt. Richards of the Devon Great Consols as "one of those extraordinary lodes only met with, perhaps, once or twice in a man's lifetime," yields copper ore of the highest quality, and producing 6 ozs. of silver in a ton of ore, as has been proved by the public samples at Tavistock, the certificates of which are in my possession, signed by Mr. James Harvey, the public assayer at Tavistock.

FRAS. R. REEVES, Secretary.

*Belstone Mining Company, Royal Exchange Buildings, Nov. 4.*

#### FRON VELLAN MINE.

SIR,—That your correspondent, "Interested," is interested in the above mine is very evident, otherwise he would not trouble you to publish his letters on two successive weeks, the latter epistle being simply a repetition of his previous remarks, visibly improved by a sprinkling of innuendoes; but whether he is interested in the mine as a shareholder, or whether his sole interest is to satiate some private pique, is another problem for the enlightened to solve, although from certain figures of speech I infer the latter.

If "Interested" is a shareholder in the mine, why not state his grievances in the proper quarter, where, doubtless, there is a remedy for him, and where, also, he will be able to get a reply to his queries? But if, as I infer, his object is to satiate some private pique by publishing disparaging remarks reflecting on the officials of the mine, I trust he has been gratified to his heart's content. "Interested's" first letter we could afford to pass unnoticed, believing it to be the best way of treating such anonymous squibbers; but when the same reprehensible remarks again appear, though in a more virulent form, it behoves us to say a few words in reply.

As I have before stated, I shall not notice his questions appertaining to the mine, as he can gain all this information by applying to the secretary at the company's London office, or otherwise of the agent on the mine. I am, however, quite prepared to reply to them; but, having left the company's service, I consider it is beyond my province at present to do so. I shall, therefore, confine my remarks to his animadversions upon the mine and its management.

I certainly did report that 70 fathoms of backs would become available when the communication between the deep adit and surface was effected, and this many months before the shaft was commenced. Now it is completed, I can but reiterate what I then reported. From the manner in which "Interested" clothes his remarks, the uninitiated would infer that all this ground had been reported as containing ore to the value of 2 tons per fathom, and also that it extended east and west, to use his own words, to "any extent." Now, if this were really the case the officials would be deserving of censure for not having erected dressing floors and making sales of ore. But what is the true state of affairs? What do the reports which have appeared weekly in the Journal state? Will "Interested" be generous enough to refer to back Journals, and then give your readers the benefit of his researches?

There is such an colour of veracity prevalent in his next remarks that it is really amusing to read it! But why fear "the displeasure of a certain benighted Philistine of this neighbourhood?" Has "Interested" ever had proof of his prowess? Has he ever witnessed under the lash of this Gadite? His remarks angular such, and give us great satisfaction to know that we have at least one whom we can depend upon to defend our little valley. A solution to his "mighty problem," let him consult his glossary, and if he fails to gain the information from there we will enlighten him on the subject. "Why not work the mine in a proper miner-like and systematical manner?" There is something very suggestive in this remark of gross mismanagement at the mine, for the query is, "Why not work in a miner-like manner?" This is rather a grave accusation, but "Interested" is too wary to say anything further on the subject, therefore I will ask him, as it is evident he knows the mine and something of its history, how many levels were being driven

in or on the lode when I accepted the management of the mine? Also the bearing of the deep adit cross-cut, which was supposed to intersect the lode at a right angle? Also the course adopted by me, and the results? Your readers will then be able to judge of themselves as to the propriety of his remarks in this respect. If he will also quote every instance of mismanagement and reckless expenditure that occurred during his tenure I shall feel indebted to him. Also, in reply to his concluding remarks, that "This is the sort of mining that deters capitalists from investing their money in the mines of the Principality." I will ask him to name one mine in the county of Montgomery, with double, or even treble the amount of subscribed capital that the Fron Vellan has, that will present such a favourable appearance as this mine. Also, any mine in Wales that will show more work done for the capital expended than there is here to be seen. I give him a wide margin, and hope he will avail himself of the opportunity. All this tends to prove that, far from being rotten, the state of Denbigh is still stedfast and firm, whereas the "Interested" one's remarks are highly suggestive of great dissatisfaction prevailing in the Emerald Isle.

For the benefit of those really interested, I may state that I have to-day been through the mine, and that the prospects have materially improved during the last month—in fact, the mine looks better-to-day than I have seen it do this last nine months.

ALFRED HARPER,  
*Llanberis, Nov. 5.*

#### EAST VAN MINE.

SIR,—I regret to trouble you again on this matter, but in reply to "A Considerable Shareholder," it strikes me that this individual is not only a "bear" of the shares, but has a great personal spite against the mine, or persons connected with it. That he is not a *bona fide* shareholder must be manifest to all your readers, for this simple reason. No shareholder, unless a lunatic, would write a letter to a public journal damaging to his own interests with a view of depreciating the shares (being a shareholder for large amount and at high prices), when he could have obtained all the information he required by simply asking in the proper quarter. I unhesitatingly say he inserted the letter with a view of knocking down the price of shares for a base purpose.

"A Considerable Shareholder" states *he is desirous solely for the shares to rise that he may get rid of his as quickly as possible*, and yet this person writes a letter tending to frighten shareholders, and thus to gain his illegitimate end—to knock down the price of shares. Again he states *I have a great regard for Mr. Gould Sharp*. I wish he would speak the truth. I certainly have no regard for him, nor for any one who, under the cloak of deception, would injure the property of others. I stated in my last letter, in your Journal of Oct. 25, there was about 700*t*. cash in hand. My information (based upon facts) was obtained from the secretary and a director, and yet "A Considerable Shareholder" says my statement goes for nothing, and is based upon hearsay. His remarks are most insolent, and only go to prove he is not a *bona fide* shareholder. He further states the mine has unquestionably declined in public estimation. It is true the lead-bearing part of the lode has not yet been cut, but the share has been "hewed" down by two or three unscrupulous men for the purpose of making money. Shareholders have been written to and told the grossest falsehoods, thereby have sold their shares, and thus the market value has been forced down through deceit and fraud.

Capt. Williams has acted wisely in not answering the letter of "A Considerable Shareholder," by having something better to do than to reply to anonymous correspondence, and all such contemptible persons are below the notion of the secretary and directors. I strongly advise the shareholders in East Van Mine not to sell, but to buy and average at present low prices. The future prospects of the mine are as good as ever, and with 700*t*. in hand sufficient for all purposes the mine will do well and silence all its enemies. It would not surprise me to find the Lolywell Mine attacked by "A Considerable Shareholder" under another assumed signature when it suits his purpose. Your shareholders and investors will do well to "sell" these two mines for investment, and "wait" placing confidence in anonymous letters.—*East Van Mine, E.C.*

P.S.—The capital in hand at East Van is 726*t*., everything paid up to date, and no outstanding debts.

#### THE CENTRAL VAN MINE.

SIR,—Capt. Martin (the company's agent) in his report on the Central Van Mine, published in last week's Journal, makes certain statements which are of very great importance when taken in combination with certain other statements made by Captain Williams (the manager) in his monthly reports on the Van Mine, published in the Journals of May 10, and June 7, 1873. Capt. Martin in his report on the Central Van Mine, dated Oct. 30, says:—"We have driven about 12 ft. north on the north and south lodes in the engine-shaft; this lode is on the opposite side to the main lode; at times it is full of fine lead. It looks like the fine lead of the Van lode; at times it is driven through the south side of our shaft." Capt. Williams, in his monthly report on the Van Mine, dated May 7, says:—"The 1*t*. East of Shaft, a cross-cut has been driven to the lode at this point 1*t*. S.E. of shaft, but found the lode unproductive. In his monthly report on the Van Mine, dated June 4, Capt. Williams says:—"The 3*t*. east of shaft, is being pushed forward as rapidly as possible by four men; the lode in the present end is unproductive."

To make these statements intelligible it will be necessary to describe briefly the relative positions of the two mines. The Central Van shaft is east of the Van shaft, and both are situated a little on the south side of the Van lode, and as nearly as possible in a parallel line with it. If this line is continued eastward it would, probably speaking, form the northern boundary of Central Van set for more than 1*t*. of a mile. The distance between the two shafts is about 2*t*. Close to the Central Van shaft, on the east, is the base of a mountain—evidently of some great convolution of nature—which rises at a rapid inclination to a very considerable height, and slopes south from its summit and the northern boundary of the Central Van set, more abruptly still for some distance, and then less so, to a depth far below the surface of the Central Van shaft.

The configuration of this mountain strongly supports the view that the direction of the lode has been influenced by it and carried south, and this view is strengthened by the fact that the East Van Mining Company, after years of search, has failed to discover the Van lode, although it was formed for that express object, and has carried on its operations exactly east of the Van Mine, at a distance of about 1*t*. of a mile from the Van shaft, and under the same management. Firstly, then, we learn from Capt. Martin's report that a fine north and south lode runs from the Van lode at a distance of about 90 fms. from the Van shaft through the Central Van shaft to the Central Van ground. Secondly, we learn from Capt. Williams' report that at 80 fms. east of the Van shaft the Van lode in the 45 fm. level is unproductive, and that in the end of the 30 fm. level, east of the Van shaft, the Van lode there is also unproductive. Thirdly, we know that between the Central Van shaft there stands a high mountain, the formation of which may have had an important influence over the direction of the Van lode. And fourthly, we have the fact that the Van lode has not been discovered by the East Van Company.

The most natural inferences to be drawn from these statements and facts are that the Van lode has been carried south, and that the Central Van set offers most favourable prospects of splendid profits in return for a vigorous and careful development.—*ALPHA.*

#### RICHMOND CONSOLIDATED MINING COMPANY.

SIR,—Your correspondent, who signs "A Shareholder," evidently believes he has made a discovery, and cuckles over his imaginary egg, while unable to hatch it. It certainly is a solemn fact that the company really owed money at the very time they paid a dividend, but before rumpking his feathers so distressingly he should have ascertained how much was the debt, and for what purpose it was incurred. Bearing in mind the enormous gross returns now being realised from the mine, at the rate of 40,000*t*. per annum, and seeing that only about one-third of this is profit, it is evident that a much larger floating capital than the company possesses is necessary to bear the large amount locked up for a time in bullion.

Now, this latent capital must either be supplied by advances from the bullion broker or by direct loans, and until the company can put by a reserve to supply the additional capital necessary, it is questionable whether it is not more advantageous to borrow directly than indirectly. Money taken up to enable an individual or a company to realise a large profit is a very different thing from borrowing to pay dividends. The remarkable coolness exhibited by your "anonymous correspondent" in snatching at the omission of the name of my residence (which if a shareholder he could have seen in the books of the company) while withholding his name altogether, makes it evident that his warmth is assumed as well as his signature.—*London, Nov. 6.*

S. A. POSTLETHWAITE.

#### RICHMOND CONSOLIDATED MINING COMPANY.

SIR,—Your correspondent, "A Shareholder," is only beating about the bush in noticing that his statement that "dividends had been paid while the company was in debt" was an insinuation that dividends had been paid out of borrowed money. If he did not mean that, what did he mean? Is he foolish enough to assert that no company paying dividends should have any liabilities? The simple fact is that he was either ignorant of the company's affairs, or he was deliberately misrepresenting them. I only adduced the excess of expenditure over capital in the new mines, such excess representing improved value, as a weight thrown in to the credit side against the small amount of borrowed money, there being more than counter-balancing weight in the fact that there was an asset in bullion and balance of profit greatly more than the loan. It evidently does not suit your anonymous correspondent to be candid.—*London, Nov. 7.*

EDWARD APPLEGARTH.

#### WHEAL VINCENT TIN MINE, ALTARNUN.

SIR,—As "Shareholder" has become so very docile, and has expressed his intention to act on my advice and withhold his pen, I think it would be unfair to trouble him any more on this subject; but, in justice to myself and for his information, I must tell him that I have referred to the reports, and find that he is either ignorant of his subject or has a desire to mislead the public. The amount of tin sold from Oct. 22, 1872, to August 21, 1873, inclusive, is in the aggregate 47 tons 3 cwt., 0 qrs., 13 lbs., realising 346*t*. 5*s*. 9*d*. which requires over 345 fms. of ground at an average value of 10*t*. per fathom to produce such results. As this correspondence cannot have been very interesting to your readers, I must thank you, Mr. Editor, for your patient and very impartial favours, and wish "Shareholder" success in his next undertaking.

ANOTHER SHAREHOLDER.

UNTRUTHFUL PROSPECTUSES—UNPRACTICAL MINING.

SIR,—It is now nearly two years since a mine was launched, with a great flourish of trumpets, on the limited liability principle, with a capital of 20,000*t*. We were told that there were five known tin lodes traversing the whole of the sett, varying in width from 6 to 10 ft., the main hole being only some 12 or 14 fms. down; and such accounts were verified by the signature of five mine agents whose reports accompanied the prospectus. There was also a map of the district duly drawn up, marking the mine in question, with others in the neighbourhood. The capital was speedily subscribed, and the shareholders quite willing to bear an legitimate risk. The first was that the shaft had been sunk several fathoms, but that it was on another mine's ground, and they were obliged to shift some 12 fms. further off and begin

again; and now, after some two years, our patience is further tried by being told no ghost from the grave to tell us what that something will be—but that the capital has all been expended, principally on agents, managers, and other parasites; and the very miserable wind-up is is the consequence. Now, Mr. Editor, can you, or any of your readers, inform me if the promoters of such an undertaking are to be allowed to the criminal law, for stating what they must have known was untrue, and issuing a map which by their own showing was totally incorrect and misleading? and the such conduct merits condign punishment, and in which opinion I concur. The Journal it may elicit further opinions from other shareholders, who will easily recognise the concern.

JUSTICE.

MUNING IN BREAGE—WHEAL FANNY.

SIR,—I noticed in the columns of your independent Journal, a few days ago, letter on the Mining District of Breage. In my strolls about that district, observing the mining operations, my attention was called to the Wheal Fanny Mine, which is situated on the south side of the Tregonning Hill, in the Grampians, and has always been noted for its good production of tin. This mine is an extensive one of un wrought ground, and a high opinion of it has been maintained for very many years by the best miners of the district, and it was considered to be the best in the country. I have, however, heard of the Wheal Fanny Mine, which is situated on the south side of the Tregonning Hill, in the Grampians, and has always been noted for its good production of tin. This mine is an extensive one of un wrought ground, and a high opinion of it has been maintained for very many years by the best miners of the district, and it was considered to be the best in the country. 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to drive with greater speed, to arrive soon at the rich smalls said to exist.—  
Under House Stations: All the stations from this point inwards have been abandoned, as very costly and unproductive.—Organos: In a letter received from Mr. Williamson, under date Sept. 18, in anticipation of his report on that property, he states that, owing to want of skill in the management of the property, the results have not been satisfactory. He can state with confidence that with a small outlay large profits may be made. Mr. Williamson then goes on to say that he has thrown aside by the previous managers 34 ozs. 9 dwt., 12 grs. of gold, which were obtained. He also reports having washed out 245 lbs. of sulphurates, the value of which was then only able to estimate, but puts it at the value of 1½ oz. to the ton, and possibly more. Mr. Williamson says—“I intend to go through the whole of our sulphurates here, and send you the bar gold.” Next referring to the geological character of the deposits, he says—“The lodes are much broken by faults at one part, near the level named the Esperanza. The lode is over 7 ft. south, and the downthrow of the rocks at the same point is 73 ft.; above the level in the Canto the throw is 10 ft. 6 in. All these occurrences are very probable for the production of good bunches of mineral.” He adds—“For my part, I am very decided of opinion that the mine will not only pay but pay well, and I deserve 1000/- or 2000/- being spent on it.” He concludes by advertising that for the first 15 days of this month they have been getting about \$16000 per day. I shall get there on the 20th, and shall be very glad if it is true, for it requires what I have so long said—that it would give from \$15,000 to \$20,000 per month.”

An abridgment of this report appeared in last week's Journal.]

**NEW ZEALAND KAPANGA (Gold).**—Jas. Thomas, Aug. 28: At the moment of closing my last letter of Aug. 3, I had only time to advise you, that more water had just been met with in the engine-shaft. From that date to

now, the water still kept increasing every foot sinking, averaging at least 50 gallons per barrel, or at the rate of 1750 gallons per hour,

which was as much as the portable engine could keep clear, winding at full speed.

In these circumstances the men could only sink 1 fm. 2 ft. 6 in. below the depth

named in my last report—22 fms. 3 ft. 6 in.; 1 fm. 2 ft. 6 in.=total depth,

at which the portable engine could only wind away a small quantity of stuff

from the shaft with this coming water, consequently I was obliged to discontinue

sinking on the 8th inst. until the winding-engine is erected to pump away the

influx of water. We have sunk through the non-metallic tough stratum over

portions of the surface of the property (same as samples forwarded to you by

me) and have come on to a much softer and congenial stratum of country,

small veins and stringers of mixed crystallized quartz, with carbonates

and small veins of solid muriatic, the country throughout being much

soil and mixed with fine muriatic, samples of same I forwarded, again by this

letter. The ground now in shaft changing so very soft, carrying a network of quartz,

veins, and becoming much more mineralised, or, indeed, full of

veins, leads me to believe we are just breaking on or going through a “blind

lode” which was not seen or discovered on surface, owing to the cap of

country overlying this lode.

The geological character of this ground, with the almost unmistakable signs of

an old flow of water, which must be conducted and carried in a large porous

channel by a soft channel of country which we have now tapped, are

the sure reasons for assuming the above. Unfortunately, we are only able to

get about 8 ft. into this ground owing to the water bursting up in the bottom with

a force quite equal to overpowering our present steam power. It was quite impossible

to deeper to test this interesting and may be important find until more power

was available to keep the shaft dry with pumps. Immediately the sinking was

halted I put the shaftmen to cut hatches for easterm bearers, and to fix the cistern

for the pump for connecting to the winding-engine, now driving. The men are busily engaged preparing the pump for dropping them in

shaft in the course of a few days. I have placed all the force practicable to

aid in the erection of the winding engine that we may be able to resume sinking

of the adit shaft again as soon as possible. I am pleased to say our engineer, James

Hodge, has made splendid progress with his work since he got the heavy founda-

tions for the buildings on the site, the chief portion of the whole foundations

are well laid and finished for the engine house and winding gear. As before ad-

vised, there is no stone here suitable for building the engine-house and foundations,

our present supply of bricks are insufficient for the present urgent require-

ments. To economise the expense of erecting this machinery, as well as to com-

plete such stones as could be made with masonry, I have thought out a plan

to use the best Kauri pine spars, well staved and bolted together,

to support the large beam on four iron pillars (or pumps) of four pumps in

each engine-house, and to make a rubble-concrete foundation for the cylinder and winding gear,

engine and my assistants are much pleased with my plan, thereby saving

expense and time, also utilising our forest timber and spare pumps to great

advantage. I have engaged two boiler riveters from Auckland for riveting the

work the moment we require their assistance. With ordinary fair weather

(being mid-winter here) I should estimate with our present staff of car-

men, masons, and labourers that we may get steam up about the end of Novem-

ber. If we do so it will be extraordinary good work to accomplish here. I beg to

call your attention is directed towards the speedy erection of this ma-

chine. Not a moment shall be missed, or nothing lost sight of, by my staff or

or to hasten its completion.

[For remainder of Foreign Mines, see to-day's Journal.]

## Greetings of Public Companies.

### PENSTRUTHAL CONSOLS MINING COMPANY.

Second meeting of adventurers in Penstruthal Consols, a mine 15 months ago in the parish of Gwennap, the richest mining

set in Cornwall, was held on Tuesday at the mine. There were

present a large number of shareholders, many of them connected

with Cornish mines.

Mr. HAMILTON, of London, proposed that Mr. M. Greene take the

chair, as he was more conversant with the accounts than even Mr.

Broad, and by far the largest shareholder.—Mr. R. R. BROAD, Falmouth, seconded the motion.—On being put to the vote this was

unanimously carried.

The CHAIRMAN, on taking the chair, said: I will read the notice

of this meeting. Having done this, he said—I will now read

the directors' report, which is as follows:—

—The directors have the greatest pleasure in calling the shareholders to

the account-house on the mine, and in doing so have acceded to the request

of the proprietors, well knowing that it is only by a personal inspec-

tion of this mine, or rather series of mines, that any adequate idea can be

had of the extent and magnitude of the works that have been carried out since

the company came into possession. The report of the managers, and the summary

operations completed under their superintendence, enter so fully into

the details connected with the mine, that it is really necessary for the directors

to tell them any further than to say that these works are of a magnitude worthy

of the extent of this great mineral grant. Since the last meeting powerful pump

engines have been erected on the Highbourn lode, and it is so placed as to com-

plete the operations of the Highbourn, Ward's, Forty Feet, and Lannarth lodes, as

also the lode to the north of Highbourn.

Another engine can be erected (which competent authorities recommend) on the old Penstruthal lode, and by these

the principal lodes in the centre of this extensive property would be entirely

mined by these two engines. It cannot but have been noticed by all present

in the substantial manner in which the whole of the works have been carried

out. The engine-house, stamping engine-house, carpenters' and smiths' shops, and

all necessary buildings, being of the most permanent character. Very large

quantities of tinstone are now lying at surface. To test the accuracy of the esti-

mation as to the quality of the tinstone raised, 1000/- worth has been sold, and it is

what was expected from the assays taken by the company's agents. On

the accounts to be presented to you to-day it will be seen that the value

of that has been raised and discovered to June 30, 1873, is nearly the opening

amount of money that has been spent; it is, indeed, rare in the opening

of a new mine that the like results are met with. Messrs. Kendall and Michell,

from the management of the mine, certainly deserve your thanks for

the satisfactory way in which they have opened out and established this great mine

on a permanently profitable basis during a period singularly trying, both as to

the question of labour and the high price of materials. In tendering their resigna-

tions, they have done so with the firm impression that Penstruthal is to be a perman-

ent success, and that statements they have from time to time made will be amply

borne out by the discoveries of one that have been and will certainly be made during

the development of the many rich lodes traversing this great tract of mineral ground,

and may truly be said to be a district in itself. During the period your directors

and the control of this company they have exercised every possible economy

and efficiency in all departments. The machinery and plant have been

placed at the very best quality, and in the cheapest possible market. The ac-

counts so far as you show that there is to the credit of profit and loss account

of £2427. 8s. 5d., which is clearly divisible among the shareholders.

Mr. HAMILTON: I have pleasure in secounding that motion. There is one little

thing I did not catch exactly, about the directors' fees being written off. Do I under-

stand that they have given up their fees, or is the payment simply in abeyance?

The CHAIRMAN: At a meeting we had in London the gentlemen were very anxious

that the directors should have something, and one gentleman present made a pro-

position that they should have 500/- a year. This was objected to by two of the di-

rectors—Messrs. Little and Batters—and then 250/- was voted. This proposal never

came from the directors themselves, and it has not been paid. But having been

voted we were entitled to charge it as a debit, and as it is not claimed it is written

off on the other side, not affecting the accounts at all. The directors have a right

to claim it if they think proper, and we were bound to put it into the accounts, as

we may have to meet it some day.

Col. COMYNX: I think I was present, and moved the resolution, which was that

the fees should be 250/- for the first year. I never thought it was likely that so in-

significant a sum would pay them for their services, therefore I only proposed the

resolution as it stands.

The CHAIRMAN: Yes; here is the resolution—“That the directors receive as

recompence for the first year 250/-, to be divided amongst them as they think fit.” Well, as yet they have not thought fit to divide it at all. (Laughter.)

Mr. HAMILTON: 500/- was proposed, and I would not have anything to do with it unless

the managers give up. I will not come in to out them on any consideration.” (Applause.) I shall endeavour that this mine be worked to your satisfaction, and in order

to do that I will try to do the best I can, and if there are any shortcomings

I must ask you to look them over. I am pleased at having entered a dividend

mine. (Laughter and applause.) We see so many mines being knocked on the

head that shortly some of my own may stop, and I have here found a situation

instead of going abroad. (Laughter and applause.) I do not disapprove of the

step taken with regard to the dividend, believing that it is but right that you should

share the interest on your own deposit. For some time past I have entertained a

favourable opinion of this set, and for this reason. My notion of mining is that

we should be careful to select from the best district we can find—(applause)—then

properly look after the business, and then I cannot see why mining should not do

as well as any other business. With regard to the district, I ask is there another

that has been more productive than the one in which Penstruthal is situated?

(Applause.) Penstruthal in the olden times, I believe, gave the largest amount in

dividends in two months that ever any mine in the county did. (Applause.) We are

surrounded here by Tresavean, Buller, and other mines, and something tells

me we shall turn up a trump yet. (Applause.) I cannot help feeling that some-

thing may come out yet, and I can only say I will use my best endeavours to turn

something up.

A hearty vote of thanks was recorded the late managers, who were declared by

all to have done their best for the property. It was pointed out that they had

merely had the preparing of the work in the short time the mine had been working.

Mr. R. R. BROAD proposed a vote of thanks to the directors, eulogising their

judicious yet economical management of the mine. It had been shown that what

was really wanted was the prosecution of the mine, and this capsized any of the

ridiculous reports which they had heard in that locality during the last 12 months.

Mr. J. HITCHCOCK seconded the proposition. The whole work of the mine was

1 Nov. 8, 1873.

The CHAIRMAN had a very hearty vote of thanks for presiding. At a lunch subsequently held the health of the under agents (Cpts. White and Morcom) were drunk, and each responded. Both remarking on the excellent work done, and the fine lodes opened up and to be found in this immense sett.

Capt. TEAGUE, replying for "Penstruthal and Cornish Mining," said: I have been connected with mining ever since I was a boy, and have laid almost every capacity in it. All these years I have been so fortunate as to hold a few shares in Cornish mines. Nothing has given me more pain than when Cornwall has been under a cloud. Often have I yearned for mining, and wished myself in a position to assist it. But I have not assisted it very much, although I hope to be connected with Cornish mining all the days of my life. (Applause.) I am one of those persons who think so much of mining that if I had 30s. or 2/-, to spare I would spend it whether I got any return or not. We must remember that this money affords employment for our miners, and I have come to this conclusion, that I would rather get 25s. out of a Cornish mine than 30s. out of any other pit-suit. (Applause.) I have yet to learn why Cornish mining should not be looked upon with more favour than it is at present. I think that Cornish mining when properly, honourably, and straightforwardly conducted is one of the best speculations which can be embarked in, whether we get returns or not. I have yet to know what any very considerable losses there have been in the county. I do not think that mining owes Cornishmen much, and I also believe that if traced back we should see that the origin of many of the wealthy in this county was mining. And if not directly Penstruthal, the most wealthy families in the county had to thank the parish of Gwennap, in which Penstruthal was situated, for much of their great wealth. (Applause.) Is there no chance of doing this again? I believe that a lot of the lodes in this mine have only been scrambled over. (Applause.) I trust that Penstruthal will go on and turn out a trump, and I am not going in for the management without taking a few shares. (Applause.)

This concluded the proceedings.

#### CATHEDRAL MINING COMPANY.

A meeting of adventurers in Cathedral Mine, Gwennap, was held in the account-house, on the mine, on Wednesday—

Colonel COMYN in the chair.

The CHAIRMAN said: Gentlemen.—You are aware that this is an intermediary meeting of this company. The accounts are not to be presented at this meeting, but it was felt to be desirable, inasmuch as a large number of shareholders in this company would be in the locality to attend the meeting at Penstruthal, held yesterday, that this meeting should take place on the mine, not only for the convenience of those shareholders, but also that the shareholders might have the opportunity of seeing and examining the property in which they have invested their money. (Hear, hear.) The directors do not propose to make any formal report at this meeting, and, therefore, all I shall have to do will be to make a few comments upon the agent's report on the state of the mine and its prospects. I will now read Capt. Michell's report.

No. 5.—Since the last meeting we have forked the water out of Colonel's engine-shaft, and have sunk the same 6 fms., 3 ft., which is now 6 ft. below the 10 fathom level, or 30 fathoms from surface; the lode has varied in width from 4 to 6 ft., composed of copper ore, some of which we have had assayed, and they made a produce of 16½ per cent. I consider it to be a strong and promising lode, and do really think that if we persevere and go a little deeper the result will be that we shall meet with a rich course of copper ore. In the 10 fm. level we have driven 4 fm. west, the lode is 4 ft. wide, and worth for tin 7/- per fathom; this ground we are able to open out for 3/- or 4/- per fathom, therefore it will leave a good profit. In the 10 east we have driven 3 fathoms, and the lode is 3 ft. wide; this end we have suspended for awhile until the shaftmen get down a little further, so that we may be enabled to cut pit and barrow-way.—Doctor's Lode. In the adit end west we have driven 5 fms. 3 ft.; this end is 17 fathoms from shaft, the lode being small, and having gone through a good piece of ground in the bottom, we propose to set it on tribute. The tributaries sold a parcel of tinstuff from this which brought 6/- per ton.—Rawson's Lode: We have commenced to sink Rawson's shaft with a good party of men; the lode is 4 ft. wide, and producing good stones of tin, worth 10/- per fathom, and judging from the ground above being worked away by the old miners, and the fine stones of tin we found in clearing up the shaft, we may expect on long to meet with a good lode of tin. I should advise you to drive a cross-cut north from the 10 fm. level to Colonel's shaft, to intersect this lode in about 15 or 16 fathoms, and it will be the means of draining the water from Rawson's shaft, and enable us to work it at a better advantage. In the adit we have driven a side-level 10 fm., and have cleared and secured 180 fathoms, and I am very pleased to inform you that the adit is now entirely clear and secure, and that the cost of working our engine, including everything, is only 25/- a month. I have only to add that I consider our prospects are better than ever, clearly improving every inch that depth is attained. Colonel's lode is presenting a highly mineralised appearance, altogether of a most splendid character, and, moreover, producing in places stones of copper of high percentage, as is true a gossan as any ever found in Gwennap over the richest courses of ore. The tin lodes also being of a very strong character, producing such rich work in places as to leave no doubt as to there being regularly continuous rich courses of ore at but little greater depth than the present working.

—JOSEPH MICHELL.

The CHAIRMAN continued: I think you will all say that this is a very satisfactory report. There is no doubt, I think, that we possess in this sett a most valuable mining property. We have got there as well-defined lodes as ever were seen in this country, each of them producing very rich stuff, and we only want a little time and patience to produce something that will gratify anyone who has ever made an investment in the company. (Applause.) I have been down to this mine several times, and though I do not profess to be a miner, yet in my judgment, from what I have seen on the mine, I am perfectly satisfied that at this Colonel's lode—possibly when we get a little deeper—the gossan will consolidate, and produce a very rich copper lode. Rawson's lode, which is good for tin, is only 15 fms. off, and can easily be worked by means of a cross-cut. I have very little doubt that the adits will shortly be able to communicate to this lode, so that we shall be able to drive upon the both lodes and get away the water by the present engine. This will enable us to develop the mine at a small cost comparatively. Doctor's lode is a small distance off: it is a parallel lode, but it has been thought better to suspend the working for the winter. The water is coming rather quick, and as it is so much quicker in winter than in summer it has been thought desirable to suspend operations for the time. There is, however, no doubt as to the quality of the lode. It is making magnificent stones of grey copper, with tin branches alongside of them equal in promise to anything that has been seen in the mines of this or any other district. (Hear, hear.) We are told that in the end of the adit there is a large lode standing, but the water is making there so quick that, as I have said, we intend to suspend operations for awhile. I do not know that beyond this I need add anything to the report. The history of the mine has been rather unfortunate, but that has not been the fault of directors or agents, or anyone connected with the concern. It arose entirely from the running in of the shallow adit, which takes off our surface water, and the water of other mines in the neighbourhood. (Hear, hear.) So serious was this that I believe 500 fms. had to be cleared last year. During the whole of that time we could do nothing in the way of working on any of the lodes, and consequently, much valuable time has been lost to the shareholders through that circumstance. We are not singular in that, because other mines in the country, through the excessive rains which prevailed last year, suffered as much as we did, and many to a much greater extent, our loss being chiefly in time. Now that adit is clear, and firmly timbered in every respect, and there is no chance of such an occurrence happening again. (Hear, hear.) I am a large shareholder in this concern, and I have the utmost belief in it. It is in a splendid district; that is what is wanted, a little patience, and we shall be amply rewarded by-and-bye. (Applause.) Our mine is in a district which has scarcely ever produced a failure; and I have been told by practical men that it is in ground of such a character that there is very little chance—in fact, no chance—of the metals being cut out. It is easily worked, and is in every way congenial for the production of metallic ores. (Applause.) The delay that has taken place in its development has arisen entirely from circumstances over which the directors have no control, and which they have done their best to remedy. (Hear, hear.) Now there is only plain sailing before us, and we hope that on the next occasion we meet we shall be able to tell the shareholders a much better tale than we have had to tell them to-day. (Hear, hear.) We have had the opinions of some of the highest authorities in the country in favour of the mine. Capt. J. Kendall, a man born and brought up in this district, of great experience—experience as extensive as any one's—who once worked in the mine himself, makes a most satisfactory report of it. Mr. Hichin, himself a considerable shareholder, has upon more than one occasion expressed the very highest opinion of the mine that any man could express; and I do not see the slightest reason for any despair of successful working. (Hear, hear.) There are numerous lodes, parallel to each other, easily可通的, and I do not see any difficulty in the matter. Let the shareholders give us their confidence a little longer, and exercise a little more patience. It has been tried severely, but I think the sequel will show that their patience will be rewarded in a most ample manner. (Applause.) I now beg to move that the report be received and adopted.

The report was unanimously adopted.

Capt. MICHELL: I can endorse all that the Chairman has said in connection with the mine, our prospects are really exceedingly good, and I believe that in a short time we shall open up a great mine; we are as you, Sir, said surrounded by the richest mines ever known, and we have twelve lodes, if not more, in our sett. Our prospects are very cheerful, and I think with a little perseverance we shall satisfy the shareholders.

The CHAIRMAN: How long will it take you to drive the cross-cut to intersect Rawson's lode?—Capt. MICHELL: We calculate about four or five months. You may put a rod to work Doctor's lode from the engine-by-and-bye. —The CHAIRMAN: Then if you cut the cross-cut you would drive upon the two lodes simultaneously?—Capt. MICHELL: Yes.

The CHAIRMAN next enquired if a considerable reduction in the cost would not be effected by the saving of coals?

Capt. MICHELL replied in the affirmative. The total cost would be brought to about 150/- a month, and there would be returns of ore that would pretty nearly meet that. Some tin was about to be sent to Trevarthen stamps to give it a trial. He was rather inclined to think the returns would nearly pay the cost of the mine. He should continue to sink while the driving was going on.

The CHAIRMAN: You have driven a little west; is it sufficiently west for you to continue driving and sinking at the same time?—Capt. MICHELL: Yes.—The CHAIRMAN: Then you mean to put in this cross-cut immediately?—Capt. MICHELL: Yes, we shall begin to cut this to-morrow. We suppose it will take nearly a week or 10 days to cut the pit, and then we shall begin the cross-cut.

The CHAIRMAN: What is the nature of the ground in the end of deep adit?

Capt. MICHELL: We have got some good stones of tin there.

Colonel COMYN: You are driving right on the lode?—Capt. MICHELL: Yes, right on the course.

Colonel COMYN: How wide is the lode?—Capt. MICHELL: About 1 ft., or 20 in.

The CHAIRMAN: What do you think of the determination to stop the pumping-engine?—Capt. MICHELL: It seems to me impossible to go on there.

The CHAIRMAN: I think we have had sufficient proof of the inadvisability of attempting any more of it.

Mr. SHAREHOLDER: Do I understand that the deep adit is on the same lode as the shallow adit?—Capt. MICHELL: You: the lode does not underlie much.

The CHAIRMAN: What will be the effect of driving this deep adit?—Capt. MICHELL: The effect will be to open up the ground where those splendid samples of tin have come from that we have seen to-day. We shall develop a new mine under the trial shaft at a depth of 70 fms.—in fact, it will be a new mine in itself, without the aid of machinery. In the other successful mines in this district they had all their tin for about this depth—50 or 60 fms.

The CHAIRMAN: You think that by driving that deep adit, and making that trial shaft, you would be able to make a sufficient trial of the western ground?

Capt. MICHELL: I do; and I propose to drive on the shallow adit as well. We have tried three which will sometimes fetch 50/- or 60/- per fathom.

The CHAIRMAN remarked it was a notorious fact in connection with the mine that the coal bill had been half the cost, so by reducing the charges in connection with the pumping engine the accounts to be presented at the next meeting would improve very favourably with what they had had hitherto. (Hear.)

Mr. COMYN expressed an opinion in favour of driving the shallow adit in preference to the deep one.—Capt. MICHELL would drive both.

Mr. HICHIN: If you are only driving one.

Capt. MICHELL agreed with this, but would rather drive both.

The CHAIRMAN: You think two months' cost could be done for 300/-?—Capt. MICHELL: Yes. I believe by clearing some adits up in the western ground we shall get more pitches to work.

The resolution was carried unanimously.

Mr. Little, Mr. Freeman, Mr. Hichin, and Mr. Richardson were re-elected directors, and at the request of the meeting Col. Comyn consented to act in that capacity, and was added to the board.

The CHAIRMAN said that before the proceedings closed he felt it to be his duty to make a few remarks with regard to his own interest in the mine, being so satisfied that he had promised large dividends to the shareholders. That was so, but still he was not responsible for it, for what he said was based upon the statements of former managers. It was reported by men who had worked in the mine that there

just now, otherwise I believe that by this time the mine could have been sunk to such a depth as would have come into a very rich body of copper. The lodes are precisely in the same rock formation that has been so productive in other mines in the district, and they are very numerous—I believe 15 or 16 altogether. Some of these can hardly fail to turn out as well as they have in neighbouring mines. (Hear.) In fact, all the indications are such as, in my experience, would attend the existence of large and rich deposits of metal at no great depth below, and make this mine a very profitable one. (Applause.)

The CHAIRMAN: These lodes are intersected by cross-courses, are they not?—

Mr. HICHIN: Yes, and by elvan courses, which have had such a beneficial influence on the lodes in the district.—The CHAIRMAN enquired if Mr. Hichin's views had been at all modified from time to time as the result of his inspections?—Mr. HICHIN replied that his opinion of the value of the mine was even stronger now than it was at first. The lode seemed to have concentrated, and he was of opinion that they had not much further to sink upon Colonel's lode before they would cut a valuable course of ore. (Applause.)

Mr. GREENE (the secretary) enquired how the character of the lodes agreed with those with which Mr. Hichin was familiar in Devon Great Consols?—Mr. HICHIN: The country is of the same general character, but of course the lodes are not so large.—Mr. GREENE asked Capt. Michell how far the two lodes between which he proposed to cross-cut were apart, and whether they underlay?—Capt. MICHELL replied that they were parallel and perpendicular—at least, the underlay was very small. They were near each other—15 fathoms—and he thought he could complete the cross-cut in three months. He expected to make returns of ore within that time. (Applause.)

The CHAIRMAN then asked Mr. Murray, who was present, to give the meeting the benefit of his practical experience as a geologist. If he would do so the meeting would be very glad of it. (Hear, hear.)

Mr. MURRAY replied that he had looked carefully over the mine that day, and from what he had seen at the surface he had formed a very favourable opinion of it. The mine stood well, on a granitic plateau, like Penstruthal, and all the conditions appeared to be favourable for metalliferous deposits. He had seen some remarkably fine stones of gossan, vesicular, and quartzite, which appeared to indicate very favourable results indeed. One very important feature was that the lode lay between two great cross-courses. (Hear.)

The CHAIRMAN would like to hear the views of Mr. Kendall. He had heard that Mr. Kendall speak of the mine in terms of the highest praise, and he felt it would be a very great satisfaction to the shareholders to hear what Mr. Kendall had to say. He wished to know whether Mr. Kendall's opinion of the mine had been formed by what he had seen in the course of its working. (Hear.)

Mr. KENDALL said he had reported entirely of what he had seen. The more he saw of it the stronger his opinion was of its favourable results. (Applause.) The Colonel's lode, upon which they had been working, indicated in its gossan that a large bunch of one was not far off from the cross-course where such large deposits were generally found. At the depth they had gone he thought it impossible that more favourable indications could have been seen. Then they had Rawson's lode, which they were going to cross-cut. That was a very important tin lode, and he remembered himself large quantities of tin being raised from it. (Hear.) The mine had been worked before by people of the neighbourhood, but capital had not been applied to it until now. The workings were already several fathoms deeper than the old workers had been able to carry them, and the lode in the bottom was worth, in his view, very much more than 12/- a fathom, at which it had been valued. However, there could be no doubt it was better to under than to over estimate. It was his firm belief that in Cathedral the shareholders had something good.

Capt. MICHELL: I may add that I believe our engine will take us down to such a depth as will satisfy us we have a very good mine. (Applause.)

The CHAIRMAN: Personally it is exceedingly gratifying to me to hear such good accounts of the state of the mine. It has cost me a good deal of anxiety, but I presume the shareholders will exercise a little more patience, and I am not afraid we shall have good results from the practical working of the mine. (Applause.)

Col. COMYN, Messrs. Freeman and Hichin were then elected directors, and the proceeding closed with a vote of thanks to the Chairman.

#### WEST WHEAL JEWELL MINING COMPANY.

A meeting of adventurers in West Wheal Jewell was held on Wednesday, in the account-house, on the mine,

Mr. MATTHEW GREENE in the chair.

The CHAIRMAN, in opening the proceedings, said: The object of this meeting is to afford the shareholders an opportunity of fully discussing the position and prospects of the mine, and of considering the way in which the operations should be conducted. It cannot be disguised from the shareholders, notwithstanding the expectations that were held out by the original managers of this company, who boldly committed themselves to the work of erecting an engine, and clearing, sinking, and securing a shaft to the 107 fm. level, that their efforts proved a failure. Upon thoroughly examining that level it has been found that the lode is not sufficiently productive to warrant our expending any more money in this part of the mine. It has, therefore, wisely been determined to apply our resources to developing the western part of the sett. This change will carry with it a very considerable saving in the monthly cost. It will be seen from the manager's report that the coal bills are now the heaviest item in the cost; and that a very important saving will be effected. A trial shaft has already been sunk on the western ground, which has proved the value of the lode. Although only down 12 fms. from surface very fine stones of tin have lately been broken from the lode, which certainly fully justify the recommendation of the manager that we should vigorously develop this western ground. (Hear.) It must, however, be remembered that we have made continuous sales of tin ever since the commencement; and from conversations which the directors have had with the manager we have reason to hope that the returns will be largely increased. In all we have sold nearly 7500/- worth of tin. I will now read the manager's report.

No. 5.—In handing you my report I may observe, in the first place, since the commencement of operations we have raised and sold about 7500/- of tin ore, the major part of which has been got from our western ground, at and above the adit level, and from trials made in the western portion of the grant. I feel satisfied that we cannot do better than confine our future operations to developing this part of the sett. In support of this argument a trial shaft has lately been sunk 12 fms. from surface, and the lode has been found to be well defined, 18 in. wide, of a granitic matrix, and interspersed with veins of pure oxide of tin. A very large saving will be effected in our monthly cost by directing our attention to the development of the western ground, and a great reduction made in our coal bills, which have been the heaviest items in our expenditure. We have commenced to drive the deep adit, which will unwater the ground referred to 70 fms. deep, and will give us that depth of backs without the aid of steam machinery. From present appearance (although very largely reducing our cost) we expect from vigorously pushing on the works named to increase our sales of tin. Samples from the lode in the western shaft have been tried this day, which will give a very high percentage of tin. We certainly are in the right position geologically speaking, surrounded by mines that have returned immense quantities of mineral. The fact cannot be denied that a fatal mistake was made at the commencement of the company's operations by erecting the large pumping-engine on the present shaft. There is, however, a good future before us, judging by the indications presenting themselves, and the rich stones of tin found in the western ground. It must be borne in mind that this mine has made regular sales of tin ever since the commencement of operations. The sales of ore will be continued, and with every prospect (by opening up the ground referred to) of having them largely increased.—JOSEPH MICHELL.

I have to move that the report be adopted, printed, and circulated, and will only add that I have a very large interest in the mine—5000/-—the greatest part of which is mine.

Col. COMYN: I have much pleasure in seconding the motion. There is no doubt, Mr. Greene, you have boldy carried on this mine, in a manner very few other men would have done. (Hear, hear.) How do you stand with regard to the preference shares?

The CHAIRMAN: I feel sure that we shall very shortly be in a position to pay our preference dividend of 10 per cent. The preference shareholders, I am fully satisfied, will be well rewarded for their courage in coming forward. We are almost entitled to hand them a dividend now.

Colonel COMYN: If we do away with the cost of the engine, and get such stuff as we have seen to-day, there is not much fear of loss. (Hear, hear.)

Mr. MURRAY: The western is higher ground?—Capt. MICHELL: We have levels running up in that direction.

Mr. KENDALL: I think it would be worth while in the report to lay more stress upon the fact that the west ground can be proved by extending on the same lode from the deep adit level. That will lay open a mine that can be drained and worked much cheaper.

Colonel COMYN: What is the nature of the ground in the end of deep adit?

Capt. MICHELL: We have got some good stones of tin there.

Colonel COMYN: You are driving right on the lode?—Capt. MICHELL: About 1 ft., or 20 in.

The CHAIRMAN: What do you think of the determination to stop the pumping-engine?—Capt. MICHELL: It seems to me impossible to go on there.

The CHAIRMAN: I think we have had sufficient proof of the inadvisability of attempting any more of it.

Mr. SHAREHOLDER: Do I understand that the deep adit is on the same lode as the shallow adit?—Capt. MICHELL: You: the lode does not underlie much.

The CHAIRMAN: What will be the effect of driving this deep adit?—Capt. MICHELL: The effect will be to open up the ground where those splendid samples of tin have come from that we have seen to-day. We shall develop a new mine under the trial shaft at a depth of 70 fms.—in fact, it will be a new mine in itself, without the aid of machinery. In the other successful mines in this district they had all their tin for about this depth—50 or 60 fms.

The CHAIRMAN: You think that by driving that deep adit, and making that trial shaft, you would be able to make a sufficient trial of the western ground?

Capt. MICHELL: I do; and I propose to drive on the shallow adit as well. We have tried three which will sometimes fetch 50/- or 60/- per fathom.

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## SUPPLEMENT TO THE MINING JOURNAL.

Cornwall, and during his journey he took the opportunity of going to South Cornwall; and he must say he had never seen a mine with which he was so much pleased. The dressing floors and everything connected with the property were upon a scale not second to any mine in the county—indeed, he believed it was admitted on all hands that nothing had been wanting to make the whole as perfect as possible. The mines in the immediate neighbourhood could not in any way be compared with it—every detail had been carried out with the utmost economy compatible with efficiency and permanency.

Mr. WALTON supported the committee in keeping the tin. The CHAIRMAN said they appeared to be at the mercy of a few smelters, and if some combined action could be adopted to resist such a monopoly it would be most desirable. They did not require anything unreasonable; all they wanted was fair price for their produce.

After some further discussion it was unanimously decided that the selling of the tin should be left to the discretion of the committee.

The CHAIRMAN said that they had found Messrs. Willyams and Co., of Cambridge (the bankers), very accommodating to them in their financial arrangements.

He had expressed a wish that the company should open an account with them.

Upon the proposition of the CHAIRMAN, seconded by Mr. WALTON, Messrs. Willyams and Co. were appointed local bankers.

Messrs. Weston, Field, and Fraser were elected the committee of management.

A vote of thanks to the Chairman terminated the proceedings.

## CWM DWYFOR COPPER AND SILVER LEAD MINES.

A special general meeting of shareholders was held at the company's offices, St. Clement's House, Clement's-lane, on Thursday,

Mr. JOSEPH HOPGOOD in the chair.

Mr. G. J. GRAY (the secretary) read the notice convening the meeting.

The CHAIRMAN remarked that, inasmuch as the sole purpose of the meeting was to consider the confirmation of special resolutions which were unanimously passed at the special general meeting on Oct. 21, it would be unnecessary for him to trouble them with any lengthened remarks; indeed, the shareholders were well acquainted with the nature and object of the resolution, and they knew that the business was of a purely formal character. To show that the small attendance was not due to any want of interest in the affairs of the company, he might mention that most of the shareholders had forwarded proxies, which were in the hands of Mr. HARVEY, representing more than 7000 out of the 10,000 shares. He would not detain them with any further remarks, but would merely formally move the confirmation of the resolution:

"That the capital of the company be increased by the issue of new shares at par, such aggregate increase to amount to 75000, to be divided into 7500 shares of 1/- each, making the nominal capital of the company 20,000/-, and that the conditions contained in the Memorandum of Association of the company be modified in respect of such increase of capital accordingly."

Mr. KIRK seconded the resolution, which was then put to the meeting, and was unanimously carried.

The CHAIRMAN remarked that the object of the second resolution was merely to add a legal requirement, and to formally embody the resolution they had just passed with their Articles of Association. He would, therefore, propose—"That the above resolution shall be considered as adding to, and so far as may be necessary for the purposes thereof, as varying the regulations of the company contained in the Articles of Association."—Mr. KIRK seconded the resolution.

Mr. HARVEY said that before they finished the meeting by passing that resolution he would like to give a little information as to some assays which they had made. They had sent several samples of ore from the mines to Messrs. Johnson and Sons, the assayers, to the Bank of England, and the results obtained by them were most encouraging. Sample No. 1 gave by the dry method 4 per cent. of lead, but the product of fine silver was 21 ozs. 15 dwts. to the ton of ore, and this was comparatively poor in silver, yielding only 2 ozs. to the ton of ore. Sample No. 3 was a sample of copper ore, and yielded 23 per cent. of copper, the product of fine silver being 1 oz. 10 dwts. per ton of ore. From the somewhat exceptional character of No. 1 sample, he thought it desirable to ask Messrs. Johnson and Sons for some further particulars concerning it, and in reply to his enquiries he wrote, that "considering the small quantity of lead contained in the ore No. 1, they were of opinion that the silver mainly exists in the form of ore, and in combination with the galena; assuming that the lead and silver do exist together, it would give a product equal to 543 ozs. 15 dwts. troy in the ton of lead, or 1.66 per cent." Another sample of ore which they had had assayed by the same method gave 17 per cent. of lead and 52 ozs. 10 dwts. of silver to the ton of ore.

A SHAREHOLDER enquired what percentage of lead in the ore would suffice to extract it?

Mr. HARVEY said that 2 or 3 per cent. would pay for extraction, but that it would be unnecessary in their case to work ore of so low a produce unless it were very rich in silver.

Mr. HARVEY believed that at present they could easily break 10 tons of ore per day, a sum not to be exceeded when the railway was likely to be opened?

Mr. KIRK said that the railway was rapidly progressing, but that, at the present moment they were waiting rather for the crushing machinery than for the railway.

The machinery would very shortly be upon the mine, and with regard to the getting of ore it would merely be a question of how many men they employed; there was plenty of labour in the district.

Mr. HARVEY thought that too much importance could not be attached to the report of the assayers stating that the silver existed as an ore of silver, and not in combination with the galena. If this were so they would have to dress the ore separately, he believed there was frequently great loss through dressing it too highly.

Mr. HARVEY observed that at the Van Mine 50 per cent. of the returns were composed of dressing and other expenses; yet they all knew what enormous profits the large dividends they paid. Their crushing and other machinery would all be ready in a few months.

A SHAREHOLDER would like more precise information as to when the railway would be ready?—Mr. HARVEY remarked that they had loaned barrack accommodation to the contractors, so that the work would be interfered with as little as possible by bad weather, and he believed it would be completed by the end of the year.

Mr. HARVEY believed that at present the realisation of large profits from the mine was merely a question of a very little time.

The second resolution was then put to the meeting and carried unanimously, proceedings terminating with the usual complimentary vote of thanks to the chairman.

## NORTH HENDRE LEAD MINING COMPANY.

The third ordinary general meeting of shareholders was held at the offices of the company, Westminster-buildings, Chester, on Oct. 31, Mr. H. R. BOWERS (Chairman of the Board) in the chair.

The SECRETARY read the notice convening the meeting, and the minutes of the last general meeting, and the reports and statements of accounts were submitted.

The directors' report showed that there had been an expenditure on capital account during the year ending September, 1873, of 1198/-, 15s. 10d. The sales of lead during the year were 340 tons, of the value of 5530/-, 5s. 6d. The profit for the year was equal to 11½ per cent.

Capt. John Lean's report, after referring to the various points of operation, stated that the surface erections have all been completed, and answer their present requirements. They will have to make an alteration in the dressing floors, as they are too limited for the work they have to do. By opening on cross strings and lodes, as discoveries are made, he hopes to increase the samplings in like proportion to the last year, which have been almost doubled. He congratulates them upon having one of the best properties in the Principality, and the more he sees of the large courses of opening out the more he is convinced of a greater body yet to discover, and it will be his study to do so.

Mr. Walter Eddy reported that all the ore raised has been got from the drivings, and the reserves, or ores outside of the levels, have not been touched. He considers the mine worth double as much now as before the trials were made. The levels being driven in the flat answer the purpose also of cross cuts, as they must intersect east and west lodes in the sett, and when such an occurrence takes place he will be much disappointed, and it will be against all analogy, if it does not result in the discovery of a great body of ore in the vein.

The CHAIRMAN then moved the adoption of the reports and accounts, and in doing so congratulated the shareholders on the satisfactory state of the accounts and the general position of the company. Last year there was present the difficulty of getting rid of the water in the mine; this, however, most fortunately turned out to be only surface water, and it was readily overcome when the new shaft had been sunk deep enough to communicate with the old workings. The mine was at that time undeveloped, and had only one straight course of lead, which might have come to an end, but now the mine is opened out north, south, east, and west, and wherever the drivings have been made they have opened on lead-bearing measures, and the field of lead ore appears to grow greater and greater. The directors

have been perfectly satisfied with their local manager, Capt. John Lean, and he has fully justified the confidence they placed in him. Capt. Walter Eddy had reported most favourably of the management of Mr. Lean, and he (the Chairman) had received a letter to that effect from him. The quantity of lead raised, and the amount realised by the sales of ore, had been quite as much as could have been expected, the sales having gradually increased from 20 to 40 tons a month during the last nine months, and the haul fully expect that in the next 12 months dividends may be expected of 15 or even 20 per cent., and that the mine will, sooner or later, prove to be one of the most valuable ones in the neighbourhood. Last year a scheme was proposed to buy the powerful engines and pumps of the Great Hendre Mine, for the purpose of unwatering the district. This was not, however, carried out, owing to the want of general co-operation, and the scheme would have been of no immediate advantage to this company. A proposal is now being made that a company should be formed to drive and complete the deep level. If this is accomplished it will unwater the whole district, and give relief to those companies now affected. This company's present get of ore is above the water level, but it may be supposed that the greatest quantity of ore would be found below the level of the Hendre water. A deputation of your board has been appointed to meet a meeting, for the purpose of discussing this matter, and, if found desirable, a general meeting of the shareholders of this company will be called to consider it. The unlisted shares have not yet been interfered with, and it is deemed prudent to reserve them for any future emergency.

Mr. BROWLEY, in seconding the motion, concurred in everything the Chairman said, and, in addition, stated that the North Hendre Mine seemed to be quite safe from the "dead water" at present, and that the Brynzwig Mine had sunk 600 yards lower than the North Hendre, and had not yet reached the water.

The motion was put to the meeting, and carried unanimously.

The following resolutions were then passed:—1. That a dividend of 2s. 6d. per share on the paid-up shares, and 2s. 3d. per share on the new shares, being at the

rate of 5 per cent., free from income tax, making (with the interim dividend paid in May last) 10 per cent. for the year, be now declared, payable on Nov. 5.—2. That Messrs. Robert Wright, Henry Simpson, and John Kenyon be elected directors of the company.—3. That Mr. John Caldecott be re-elected auditor of the company.—4. That the cordial thanks of this meeting be presented to the Chairman and board of directors for their most valuable services and close attention to the business of the company during the past year.—5. That the thanks of this meeting be presented to Mr. J. Jones (the secretary) and Capt. John Lean (the local manager) for the efficient and satisfactory manner in which they have performed their respective duties.

The meeting concluded with a vote of thanks to the Chairman for his urbanity in the chair and general attention to the interests of the company.

## VANCOUVER COAL MINING AND LAND COMPANY.

The half-yearly meeting of shareholders was held at the City Terminus Hotel on Tuesday,

The Hon. C. W. FITZWILLIAM, M.P., in the chair.

Mr. S. M. ROBINS (the secretary) read the notice convening the meeting. The report of the directors (which has already appeared in the JOURNAL) was taken as read.

The CHAIRMAN had again to congratulate the shareholders upon the satisfactory progress that had been made in the business of the company—it certainly would have been more satisfactory had it not been for the accident, over which the directors had no control, by the breaking through of the roof, and the consequent inundation of the colliery, which had greatly lessened the profits. Even now the level had not been entirely cleared of the debris, but it would so be set right, when the Douglas Mine would again be in a position to return 3500 tons of coal per month. Successful operations had been carried on at another mine, which his brother directors had honoured him by calling the "Fitzwilliam," the output from which had been 5030 tons, principally from the "slope," but a fault had "nipped" out the coal. They were now, however, getting through the "nip," and hoped to proceed with the same success as attended the first working of the mine. On the Newcastle Island they had another seam, from which had been raised 1095 tons during the six months; no machinery had yet been erected, but it was intended to push on the work as rapidly as possible. He had just seen Mr. Rosenfeld, the company's agent in San Francisco, who states that he can sell as much coal as the company could supply, adding that it had but one fault, and that was it was rather dusty, of which what are called in America the "helps" complain. The directors had just sent out a thoroughly qualified under-agent to assist the manager, and the report from Mr. Bell (the gentleman referred to at the last meeting) contained valuable suggestions, which the directors would do their best to see carried out. As usual, they proposed to declare a dividend at the rate of 10 per cent. per annum, in which they hoped to be supported by the shareholders—it would absorb 4130/-, and leave a balance of 2662/- to be carried forward. He hoped this would be regarded as satisfactory, but by increased workings and a larger output he confidently believed that in the future the most sanguine expectations of the most sanguine shareholders would be fully realised. He then moved that the report be received and adopted.

Mr. TRENHOUL seconded the proposition. There were only two features to which he wished to direct attention—the large amount of cash, 24,000/-, and the liability still remaining upon the shares. In the course of two years he found the position of the company had improved financially something like 12,000/-, in addition to which dividends had been paid of 45,000/-, and ample provision made against the coal consumed from the mainland—principally the amount of coal now won on the mainland was greater than two years since. They were told at the last meeting that when the "slope" on the island had been driven 700 ft. the "reserves" would be 1,250,000 tons, so that there was a "reserve" quite independent of what appears in the balance sheet of something like 1,200,000 tons. If that were valued at only 40/- per ton, it would give 40,000. He wanted to know why the value of a property like that did not appear in the balance sheet? Certainly some value ought to be put upon it, so as to enable them to make their 10% share 9/- paid. It had been done in other companies, and could be done in this case without crippling the resources of the company, and then leave 13,000/- unclaimed, and the cash balance untouched. The position of the company would not in any way be weakened, while the shareholders' position would be largely benefited.

Mr. C. H. HILL said that, before entering upon such a weighty and grave matter as to take credit for coal won, the question should be well debated and considered.

The CHAIRMAN, in reply to a question, stated that the sides of coal had been sold tons during July, August, and September. Mr. Bell had been paid 350/- for his report and other services, and was to receive 150/- more, and the directors considered the outlay was in no way excessive.

Mr. J. HOCKX asked if the board were quite satisfied the managers were amply provided with pumping machinery?—The CHAIRMAN said an additional pumping engine left to-day for Vancouver.

Mr. WILD (a director) mentioned that there was already a spare engine on the mine.

The motion adopting the report and accounts was then put and carried unanimously, and a dividend for the half year at the rate of 10 per cent. permanent was declared.

Mr. WILD mentioned that the cost of the accident was very nearly equal to the profit of the six months, 3600. He did not think any blame was to be attached to anyone; but even with the increased output which had been made, had not the accident occurred, the profits would not have been so large as in 1865 and 1866, which was attributable to the low price of coal. He did not think there was any chance of the figure improving, but there were many chances of increasing the output, and thereby diminish the proportionate cost. The Fitzwilliam Mine would do that, as during the next six months the output from the island ought to be as much as from the mainland.

The CHAIRMAN having promised on behalf of the board that the question of reducing the capital should be considered, no resolution was proposed upon the subject.—A vote of thanks to the Chairman and directors closed the proceedings.

—A SHAREHOLDER: Are there not baskets in England we could put our eggs in?

Mr. SPRATT: There are two propositions before us from close at home. There is no necessity for us to go into American enterprises. I am in some which are not very fortunate; and if ever I again consented to any single penny going to America, it should be in an enterprise which I could almost guarantee. (Cheers.)

The SHAREHOLDER: I am glad to hear you say so.

A SHAREHOLDER: Are our mines of no further value to us as to yielding ore?

Mr. SPRATT said he might explain it in this way.—The two mines, the Eberhardt and Aurora, and the South Aurora, were divided by an almost invisible line. If they found a great deposit in the Eberhardt or the North Aurora, it would save this company great trouble and expense; if a deposit were found on this company's property, arrangements could be made to work it from the Eberhardt shaft in the same way that the Eberhardt was working, through one of the company's tunnels. There was a good feeling between the two companies, and in the event of any discovery being made, the directors would make an arrangement which would entail as little outlay as possible upon this company.

A SHAREHOLDER: Where is the cash balance of 29,000/- odd?

Mr. SPRATT: At the London and County Bank.

Mr. LANDOR said that, looking at the results of the few months working, during which the present board had been in office, he thought the shareholders had reason to congratulate themselves upon the profit which had been earned. The mill was earning a profit of 15,000/-, or 20,000/- a year, although working on low terms. The dividend, no doubt, was quite satisfactory to those who bought their shares at 1/-, but to those who bought at 5/- it was not satisfactory. (Laugh.) He was glad there was no objection on the part of the directors to have an addition to their number. Seeing that negotiations were going on which involved the outlay of a considerable sum of money, he thought it was desirable for the shareholders to secure all the talent they possibly could.

Mr. BERGTHEIL also expressed his satisfaction with the statement of the Chairman, that the directors were willing to fill up the vacancy caused by the retirement of Mr. Seyton, because there was a good deal of hard work to be done, and the appointment of a fresh director would give additional confidence outside. He was sorry to hear that Mr. Seyton had left the board, that he had sold his shares and gone away; that was unsatisfactory, but, no doubt, Mr. Seyton knew his own business best. With respect to the report, the shareholders were asked to confirm a dividend of 2s. per share; he gladly received it, however small—"the smallest donation thankfully received." (Laugh.) But he must tell the directors that by accepting the dividend he did not thereby endorse their accounts or their acts. The directors came and stated that they had earned so much, and he accepted that statement; but if it afterwards turned out that the dividend was paid out of capital, he should hold the directors responsible. Again, Mr. Spratt had referred to other mining properties; now, he knew Mr. Spratt was a very able man, and he had by his side the best talent in England. Their Chairman was the vendor of the Aurora, and the vendor of the Eberhardt and Aurora was also present, and he hoped that these mines would turn out profitable, if not, he was content to leave American mining in America, and to divide the money in hand. There were many shareholders who were not very anxious to invest the 29,000/- of precious gold in American silver, and if the directors could not do anything profitable with the money in hand let them say so, and the shareholders would divide it. It would not be fair not to express to the directors what would be the impression of the outside public. He had the honour of knowing almost every member of the board, and he had every confidence in them, and he had also every confidence in the assurance of Mr. Spratt that they would be extremely careful before they rushed into American mines; but no American would satisfy the outside public that fair dealings had taken place if an American mine was purchased. As regards mining at home, he knew nothing about it; but before the shareholders were bound to any bargain, he hoped the directors would call them together and ask their assent. As regarded the removal of the mill, he hoped the expense of such removal would not be incurred until the directors were fully satisfied that it would not be required at the South Aurora mine; and in the event of its being removed, he hoped it would be to some place where there was every probability of its earning good returns for the shareholders. (Cheers.)

A SHAREHOLDER asked how it was that the chloride flats (which were thrown in as a sort of salve to the shareholders) had never been worked? He believed that some ore had been extracted there, but ever since the property had gone to the dogs, and the chloride flats had never been worked.

The CHAIRMAN said that trial shafts had been sunk to a considerable depth, but nothing had been found, and he did not think it was desirable to spend the company's money in any further explorations there.

The SHAREHOLDER: How was it that the chloride flats were thrown in to compensate us?

The CHAIRMAN: At that time there was some ore in the chloride flats, but it has been taken out; it never had any great value, and I never said it had. It belonged to parties outside the company. I never had any interest in the chloride flats. The property cost you nothing; they gave you what there was there.

The SHAREHOLDER: The resolution was then put to the meeting, and carried unanimously.

Mr. SPRATT said that two or three questions had been put by shareholders which he should like to answer. With respect to the chloride flats, when the company got back 50,000/- they also got the chloride flats into the bargain. He believed that Mr. Logan was the only individual who was ever clever enough to find anything there—a laugh—but he had no doubt that there was a large quantity of low-class ore on the chloride flats, and also in the adjoining mines, which it would not pay to work. As regards the addition to the board, the directors had the power of filling up the vacancy immediately. Mr. Seyton resigned; but they did not do so, as they did not know any gentleman who would undertake the office. It was not a very fat office to work hard, and to undertake a huge responsibility, for 100/- a year, and therefore, there were not many "Richmonds in the field"; but he was glad to say that there were two gentlemen who were willing to undertake the office—namely, Mr. Bergtheil and Mr. Gold. As regards Mr. Seyton, that gentleman seemed to be in a large way of business, and had some connection with railway and banking operations, which necessitated his attendance in America, and, therefore, he said he had better retire, inasmuch as he might be away some months, and, therefore, could not attend to the business. He was surprised to find that Mr. Seyton had afterwards parted with his shares.

The SECRETARY: Mr. Seyton has simply transferred them to his broker, to hold them until his return, and "to provide against accidents by sea and land." He has the same interest in the company as ever. (Cheers.)

Mr. SPRATT said that as regarded the responsibility of the directors in paying a dividend there was a large portion of the money necessary lodged in the bank, and the directors held the receipts, and he thought that was *prima facie* evidence that the company possessed the means of paying a dividend. Therefore the directors felt perfectly justified in recommending it. The gentleman who thought that the directors were going to buy properties in America was quite under a mistake; the directors had no intention of buying properties, but if certain other gentlemen were willing to risk a few thousands of pounds upon being satisfied that good results would be obtained, the directors were willing to risk a portion of their capital in the same boat. The directors had no notion whatever of taking the entire responsibility. As regards the removal of the mill, that would only be done when all chance of employment for it in its present position was gone, but in the event of there being no employment for it in its present situation, surely it would be bad policy for the directors to allow a property which cost 20,000/- to 30,000/- to remain idle, when by expending 2000/- or 3000/- upon it it could be made to yield remunerative returns to the shareholders. A remark had been made that the directors ought not to enter into any operations until they had called the shareholders together, and submitted it to them. Now, the shareholders must repose a certain amount of confidence in the directors, or they would not get gentlemen to serve them. But, beyond that

takings might fall through because the shareholders (who did not know so much about the details as the directors) did not approve of them. He, therefore, hoped the shareholders would repose full confidence in the directors, and not require every little operation of this kind to be brought before a general meeting of the shareholders. (Cheers).

Mr. BERGTHEIL said he referred entirely to the buying of mines in Nevada, and not to those other operations to which Mr. Spratt had alluded. If nine or ten other gentlemen associated themselves with the directors in carrying out an enterprise there was security in the very fact, but if the directors by themselves entered into any speculation he thought that, for their own sakes, they should bring it before the shareholders before finally concluding it.

On the motion of the CHAIRMAN, seconded by Mr. BERGTHEIL, Mr. Spratt was then re-elected a director.

Mr. LANDER then proposed that Mr. F. Gold be elected to fill the vacancy on the board caused by the retirement of Mr. Seyton. He said that Mr. Gold had had great experience in business, and would, he was sure, be of great service to the company.—A SHAREHOLDER seconded the resolution.

A SHAREHOLDER: I do not know Mr. Bergthell, but he is evidently a man of great earnestness, and I have such confidence in his capacity that I think he would be a very useful man to be on the board. I, therefore, propose that he be elected a director in the place of Mr. Seyton.

Mr. BERGTHEIL said he could not accept the nomination in opposition to Mr. Gold.—Mr. GOLD: Let all that has passed previously be ignored, and let the shareholders elect whom they like.

Mr. BERGTHEIL said that, under these circumstances, he should be willing to serve if elected by the shareholders.

A show of hands was then taken, and Mr. Bergthell was declared duly elected a director.—The auditor, Mr. James Ford, was then re-elected.

A special resolution was then passed, by which in future the meetings of the company will be held on the first Wednesday in March in each year.

A vote of thanks to the Chairman and directors closed the proceedings.

#### GLASGOW AND CAPE BRETON (NOVA SCOTIA) COAL AND RAILWAY COMPANY.

A meeting of shareholders was held at the offices, Great Winchester-street-buildings on Wednesday.—Mr. MICHELLS in the chair.

To take into consideration, and, if approved, to sanction and proceed to effectuate by such resolutions as are hereinafter indicated a scheme which has been arranged between the directors of this company and the directors of the Louray Coal Company, Cape Breton (Limited), and the directors of the Schooner Pond Coal Company Limited; for the amalgamation of the three companies into one united company, under the name of the Cape Breton Company (Limited). The arrangement is contained in a provisional agreement between the three companies, and agreement is dated Oct. 24, 1873.

The CHAIRMAN said the directors had thought it better to call the meetings of the shareholders of the Cape Breton Company and the Schooner Pond Company at the same hour, as there were many gentlemen who were shareholders in both companies, and the remarks he had to make would apply equally to both classes of shareholders. The meeting now being held, however, was a meeting of the shareholders of the Cape Breton, and, therefore, he would ask those gentlemen who were shareholders in the Schooner Pond Company only, not to vote on the questions submitted at this meeting. He (the Chairman) then proceeded as follows:—You have heard the summons to our meeting read, and we have asked you to come together to give your sanction to the scheme thereby foreshadowed. It has been after mature consideration, and, as we believe, in the true interest of our shareholders (some of the largest of whom, I believe, thoroughly approve of the step we have taken), that we have determined on bringing the proposed amalgamation before you; and I trust that the course we have adopted will have your entire approval, and that you will accord us your support and sanction for what we have undertaken. After much debate and great consideration, it has appeared to us that the ultimate success of the various undertakings in Cape Breton can and will be greatly enhanced by the course proposed. The experience of the last two years has shown the almost absolute necessity of having a rail communication with Louisburg; and by the amalgamation this desideratum will be accomplished. The union of the various companies under one management will enable the working expenses to be materially reduced, and will avoid the competition and contentions which necessarily arise from divided interests. The acquisition of the new mining areas will place under the management of the new company nearly the entire coal-producing portion of the island, served by the proposed and existing line of railway, commanding the supply of coal to Louisburg while retaining the outlet of Sydney. This most desirable end will be well understood by all who have considered the question of the disposal of the output. Beyond all this, it is evident that a much larger plant than at present exists, or is possessed by our company, is requisite to work adequately the very large trade that is springing up; and this will be obtained by the new capital to be raised. We have made profit, but it has been consumed for repairs and extensions. We think that the terms offered to us are fair, and that the proposal to give about six-ninths in paid shares in the new company for five in the present company, or about 20 per cent., as an equivalent for the assets given up, will be looked upon as a moderate but still just arrangement for the future. I do not wish personally to enlarge, or to say too much; but, as a very large shareholder, I feel that I am doing the best I can for myself, and can assure you that I believe the amalgamation will do more to make a success than any other course I can look to. I can only say that, should you desire to confer with the directors they will be most happy to afford every information. (Cheers.) I shall not say anything more, but will move the first resolution, "That the company be wound-up voluntarily."

Mr. HEATH seconded the proposition, which was carried unanimously.

Upon the proposition of the CHAIRMAN, seconded by Mr. BROWN, it was unanimously resolved to appoint Mr. J. L. Elkin Liquidator.

Mr. BLITZ, in reply to a question, stated that in the transference of the property it was necessary to take over all existing arrangements from the old companies, but it was quite competent to the new board to reconsider the arrangements with Mr. Gisborne, and no doubt these arrangements would be re-organized in some way. The agreement with Mr. Gisborne did not terminate till the year after next.

A SHAREHOLDER said that Mr. Gisborne had desired him to place his resignation in the hands of the new directors.

Upon the proposition of the CHAIRMAN, seconded by Mr. WATTEN, it was unanimously resolved—"That the liquidator be authorised to dispose of the undertaking to the Cape Breton Company (Limited), for the consideration, and in the manner, and upon the terms contained in an agreement dated Oct. 24, 1873, and expressed to be made between the Louray Coal Company, Cape Breton (Limited), of the first part; the Glasgow and Cape Breton (Nova Scotia) Coal and Railway Company (Limited), of the second part; the Schooner Pond Coal Company (Limited), of the third part, and Frederic William Blunt, acting on behalf of the promoters of an intended company, to be called the Cape Breton Company (Limited), of the fourth part.

Meetings of the Schooner Pond Coal Company and Louray Coal Company were then held, when similar resolutions were unanimously adopted to those passed at the meeting of the Glasgow and Cape Breton Company.

The CHAIRMAN said he looked forward most hopefully to the success of the Cape Breton Company (Limited). They had the coal, and there could be no doubt as to the necessity of it, nor that there were immense advantages in the district that must eventually be developed. They had had two years' work—during the first but little progress was made, but the second had not been unsatisfactory, and if a very large outlay had been made certainly some profit had been realised. He trusted that in future they would meet with very much better results than the board had ever yet been able to submit.

Mr. WATTEN proposed that a vote of thanks be passed to their indefatigable Chairman, who, no doubt, had the welfare of the company at heart. He (Mr. White) believed that this new institution possessed every element of success—coals would never again be exported from this country to America, and he had the testimony of shipowners not only that the coal was good but that it improved.

Mr. ELKIN seconded the proposition, which was put and carried unanimously.

The CHAIRMAN acknowledged the vote, which closed the proceedings.

#### UNITED MEXICAN MINING COMPANY.

The ordinary half-yearly general meeting of shareholders was held at the offices, Great Winchester-street-buildings, on Wednesday.

Mr. CHARLES MORRIS in the chair.

Mr. W. M. BROWNE (the secretary) read the notice convening the meeting.

The report of the directors stated that for the six months ending June 30, 1873, there had been an excess of outlay on the old concern of \$11,821. The total amount of expenditure on the new concern has been \$12,125, but as the original owners have paid \$4229, the net outlay on account of the company has only been \$826. The available funds in the hands of Mr. Harvey, in Mexico, on Sept. 23, the date of his last report, amounted to \$65,57, and the estimated value of tortos and ore under reduction to \$10,547. The money for supplying the commissioner in Guanajuato with funds for the prosecution of the new works being obvious, and the exchange of bills being disadvantageous to the company, the directors in September last forwarded to him 100 lbs. of quicksilver, purchased in London at a cost of \$67, \$8, 10d., and as the price since this shipment has risen considerably here and in Mexico the transaction will yield a good profit.

The CHAIRMAN found himself in the same difficult situation as upon one or two previous occasions—that he had but little to tell the shareholders. The explorations in the new concern were encouraging, and nothing had occurred to cause disappointment; no discovery had yet been made, but they still entertained the confident opinion that satisfactory results would be realised sooner or later. He could but express regret at the high price of quicksilver, and if it advanced much higher it would become almost prohibitory; therefore, they had to hope that some discoveries of that valuable agent would be made elsewhere, and so reduce the price. At Jesus Maria Mine they had endeavoured to reduce the expenses as much as possible, and according to the last advice the cost was being brought within the limit that the returns would meet the outlay. He then moved that the report and balance-sheet be received and adopted.—Mr. GOLDSMID seconded the proposition.

Mr. DOANE asked if the explorations in the new mine could be accelerated, with due regard to economy? Even if it could be done with a slight increase of expense, they would save what they called the dead-weight in this country.

Mr. FURBER said the enquiry, as well as the remarks, were the most judicious he had ever heard at any United Mexican meeting. It was quite certain that if the dead-weight could be divided over a larger

surface it must fall less upon particular works, and in this case they had a certain amount of work to do in driving the adit level. They were now driving 3 yards per week, and it could not be much increased, the rock being very hard; by increasing the workmen progress would not be greatly accelerated, while difficulties of ventilation would arise. Other works might be undertaken, but then more funds would be required, and he did not think it would be prudent to do so at present. If any shareholder would call at the office he thought he could show him that they were engaged in a really legitimate mining speculation, offering very reasonable chances of success.

The CHAIRMAN, in reply to a question, stated that the last call was unexpended, and there were about \$10,000 in Mexico.

Mr. FURBER said that they did not expect to find much until the adit had been driven under the mines which gave ores near the surface. He could not say what was inside the mountain, but he had great hopes; personally he was spending a great deal of money towards realising those hopes. To complete the adit would take five, six, or seven years, but there might be ore close to the present end of the adit, and it might be half a mile off. The adit was now getting very nearly under Buenos Ayres Mine, from which he had seen ore yielding 18 marcs per ton, with a fair amount of gold. The excavations showed there was ore at the surface. For the mine of San Miguel de la Providencia on the same lode when last worked he provided 600t, but was driven out by the water.

The CHAIRMAN, in reply to a question, stated that before this work was commenced the shareholders resolved, at a special meeting convened for the purpose, to subscribe 15s. per share; out of that amount only 5s. per share had been called, and of that 2s. 6d. per share remained in hand; and very shortly they would be served if elected by the shareholders.

A SHOW OF HANDS was then taken, and Mr. Bergthell was declared duly elected a director.—The auditor, Mr. James Ford, was then re-elected.

A special resolution was then passed, by which in future the meetings of the company will be held on the first Wednesday in March in each year.

A vote of thanks to the Chairman and directors closed the proceedings.

directors did not wish that, but told him that if he liked to resign in favour of Mr. Darbyshire at that time they would appoint him. However, this had not been done, and Mr. Baxter had resigned without nominating anyone to succeed him until after our report had been issued to the shareholders. So far as Mr. Darbyshire was personally concerned, the directors would be very glad to have him at the board, as he had always stood well by the company. The other gentleman has a large number of shares, and has also stood by the company, and, therefore, both gentlemen had equal claims. However, the directors did not wish to take part in the matter, but to stand by their proposal that there should be no addition to the board. If there were to be a vote he thought that they would have to go beyond their own personal feelings, and demand a poll. There was only one other remark which he wished to make in the matter. Before they entered the room they had heard the circular of a gentleman, who said he was given to understand that the directors had promised to give them a shareholders director. That was perfectly true. The directors had been appointed under the Articles of Association, but subsequently they were very rapidly becoming shareholders' directors, which he maintained to be the more honourable position. Since they had started in the new company two of the directors (himself and Mr. Baxter) had retired, and had been duly re-elected by the shareholders, and he hoped that the two gentlemen remaining would be half a mile off. The adit was now getting very nearly under Buenos Ayres Mine, from which he had seen ore yielding 18 marcs per ton, with a fair amount of gold. The excavations showed there was ore at the surface. For the mine of San Miguel de la Providencia on the same lode when last worked he provided 600t, but was driven out by the water.

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Mr. CHARLES S. HILL had much pleasure in seconding the motion.

The CHAIRMAN then said that in six months they would have a meeting, and that he hoped they would be in a far better position than they were now in. He then thought Mr. Smeddle had justified their choice, and the trust reposed in him, and he thought that they should be very well satisfied with his operations.

A SHAREHOLDER asked whether they had not more confidence in Mr. Smeddle than in the gentlemen whom he succeeded, who had involved the company in a loss of 400,000?

The CHAIRMAN said they had much more confidence in him than they had had in the previous managers, he thought the board should be exonerated from all blame in the appointment of Mr. Smeddle's predecessor. He came with first-rate recommendations, and had been well received by the shareholders after his first year's management at the mines. He thought their confidence in Mr. Smeddle was well borne out by the results of his management up to the present time.

The motion for the adoption of the report was put to the meeting and carried unanimously.

The CHAIRMAN then proposed the re-election of the directors retiring by rotation, Messrs. Parke Pittar and A. L. Rawlinson, and Mr. Bischoff soon led the motion.

In answer to a question as to whether these gentlemen were regular in their attendances, the CHAIRMAN replied in the affirmative, and said that they rarely missed being present. The motion was then carried by Mr. Pittar in the affirmative, and he thought the motion was carried by Rev. Mr. Rawlinson. He said he was with his friends interested in the company to the amount of 4621 shares, and was, therefore, more largely interested in it than any other shareholder. As regards, therefore, allowances he gave far too much time to the company for his own business, but he never failed in doing his duty strenuously. (Hear, hear.)

Mr. NORMAN recited the time when the company was in a much worse position than at present. The shareholders had guaranteed the directors 15s. per share, and that amount should be willingly surrendered. He had been a shareholder 23 years, and was satisfied that they were engaged in a legitimate mining speculation, and he thought the time would come when they would reap the fruits of their expenditure.

Mr. WILLIAMSON, in reply to a question, stated that the suspense account was merely upon paper. The sum had been in ducaynes for years, and there was no reason to suppose that ever anything but a very small sum would be called. The probability was that it would never be called for.

Mr. FORD said that the company's claim upon the Mexican Government, referred to by Major Farrall, had not been forgotten.

The CHAIRMAN, in reply to a question, stated that the question of the London expenses would be taken into consideration by the board.

The resolution adopting the report and accounts was put and carried unanimously.

A vote of thanks to the Chairman and directors closed the proceedings.

#### CHIANTALES CONSOLIDATED MINING COMPANY.

Owing to the lateness of this meeting on Friday, Oct. 31, our report on the following day contained many printer's errors, which we have corrected, and now give a revised account of the Chairman's speech.]

The CHAIRMAN said, before putting the motion for the reception and adoption of the directors' report and balance-sheet, he would make a few observations, and any points upon which he might not touch, and upon which subjects more ample information was required by any shareholder, he would be most happy to afford it. It would be impossible to explain everything in the report itself without making it too long; he could, in addition to what the report contains, give some later information from the mines. The first thing he would refer to was the disappointment felt by the directors, mentioned in the report. They last fully expected, at the last half yearly meeting, that the extra steam-engine would have been ready before the dry weather set in, and that the new stamps would all have been in working order; and this expectation had been confirmed by the letters of Mr. Smeddle on the subject of more motive power. The spur-wheels had been ordered by him in December, and by the directors. These spur-wheels had been placed on a moderate axis, and were well balanced, and, as far as possible, well suited to the requirements of the engine. These spur-wheels had been in use for some time, and had given entire satisfaction. The first thing he would refer to was the difficulty of getting the heavy machinery up the river to the lake. This was really the cause, and the disappointment was not fault of Mr. Smeddle's. He would add to that which they had stated in their report, that he had the latest news in a letter from Mr. Smeddle, dated Sept. 5, the last one published was dated Sept. 3, and came from New York, whereas this last one had come by the usual West India mail, which broke down before leaving St. Thomas, and had to be sent back to the steamer for delivery. This letter explained that the tramway from San Sebastian to Etelma had been thought well to commence at the arrival of the steamer, and that would be the better course, and he explained the extra cost mentioned in the other letter. They had had, he said, one of the heaviest floods ever known, which had done some damage, but no serious damage, to the new embankment and tramway. He sent Mr. Francis to San Ciudad to enquire after the machinery, with directions to proceed to Greytown if necessary. A subsequent letter from Mr. Francis, dated Sept. 8, informed us that all the things had arrived at San Ciudad, which is the port upon the lake nearest to the mines, and though the spur-wheels are heavy, there was a prospect of getting all on the mines before the next season had made the roads impassable. The next thing he wished to explain to the meeting was the specification of the estimated expenditure required in Mr. Smeddle's letter of Dec. 30. He (the Chairman) had had a statement drawn up to show what had been done of the estimate. He had estimated that the erection of the new stamps would cost £500, or £154, had at present been spent, and the remainder would be expended in the completion of the stamps. The erection of the engine had not been finished yet, and only 100t had been spent. For the San Sebastian tramway 500t was the estimated price, and this had been completed for 57, 17s, 3d. The alterations to the stamps had been estimated at 150t, and had been completed for 132, 18s.; the carriage of stone-breaker, estimated at 12s., had cost 9s. only, so that all that remained to fully carry out his estimate was the completion of the new stamps and the erection of second steam-engine, and these, as stated in the report, could not be completed until the arrival at the mines of the spur-wheel and sheet iron. He would further explain the statement of the quantity of ore dealt with. If this were looked carefully into it would be seen that it was less than the quantity dealt with by the late manager. The cause of this was that Mr. Smeddle reckoned much finer than his predecessor, which prevented him from crushing so much ore. At this last meeting he had explained that when Mr. Bolt made the discovery of it he fairly worked it out, and did not at once take the bag of rich iron out, but at the same time he felt certain that Mr. Smeddle went more thoroughly through the ground than his predecessor had done. Mr. Smeddle had opened out more of the mine, independent of the rich part as mentioned in his report. This satisfactorily explained the difference in the average yield of the two. He had nothing further to say regarding the mines except to express his belief, and that of his co-directors, that they were being largely and properly developed under the management of Mr. Smeddle, and as soon as the stamps are ready and the engines at work in the dry season it would make them thoroughly independent of the water supply; they would then be in a very good position. There was one thing in Mr. Smeddle's report which he wished to mention, it was that he had at last decided against the construction of a reservoir. The directors had been rather anxious that this should have been erected at one time as proposed by Mr. Bolt, and which had been entirely concurring in it by Mr. Smeddle at first, for the reason that the reservoir would be a protection against the floods, and that in the dry season they would not have so much to resort to the steam power. (The Chairman) always had some fear of it, for unless a reservoir of this sort was very strongly, and therefore expensively, built it would do more damage than enough if it once broke out. It would not be fair for them to erect this reservoir at their own expense unless the other company, who would participate in the benefits to be derived from it, shared the cost of erection. Mr. Smeddle in his report said—"Having now had more experience of the climate, I have some hesitation in advising the construction of a reservoir. The sudden and heavy floods we are subject to would necessitate the structure being of a very strong and costly description to prevent any risk of its being carried away. As we shall be able during the next dry season to apply steam-power more effectively, and shall also be able to obtain more power from the water wheel by the use of the spur-wheel now in train, I think it advisable to defer the question." He was afraid of having it made when they had no reliable engineer out there, but Mr. Smeddle is an engineer, and he would not be afraid of having it made by him; but he said it would cost much more than the original estimate, and the directors concurred in Mr. Smeddle's idea that it had better not be done. In reference to the concluding part of the statement respecting the appointment of a new director, it was considered, as the present board always put in a very good attendance, although he regretted the unavoidable absence on this occasion of Mr. Rawlinson, that they did not consider it necessary to fill up the vacancy caused by the retirement of Mr. Baxter; they did not see that if they could satisfy the shareholders with the present board it was any use electing anybody else. If they had seen the necessity of electing a fresh director it would have been their duty to consider, in the interests of the company, the most fit person to elect. If there was a want at the board they would endeavour to get someone who thoroughly understood mines. However, they had a strong opinion that there was no necessity for any addition, but, of course, it was for the shareholders to express their opinion, and the directors would endeavour to carry out their wishes. Two gentlemen had been proposed, and the proposal had taken them rather by surprise, and the directors had not asked for proxies to support them; and if the resolution was passed for the appointment of one of these it was afraid the directors would be bound to demand a poll, not for their own sakes and opinions, but as they were supported by a large number of important shareholders, representing, with the share of the directors, 15,000 shares. It would be impossible to accept the vote, however good the candidates might be. As to the candidates, one was Mr. Darbyshire, and he would like to explain that when Mr. Baxter occupied a seat at the board he expressed a desire for Mr. Darbyshire to be added also to the board; the

they were anxious on the matter, and he said that at the last half yearly meeting they need not make the fast call they had not done so, but since then they had been disappointed in the return through circumstances which he had explained, and they had borrowed 2000t to save them from making this last call. The estimate of Mr. Bolt for works at the Payon Mine would now be no guide to us, as it was proposed to concentrate all our additional stamps there, and to conduct the operations from that point on a larger scale than had been contemplated. The matter had not been lost sight of, and they had advised Mr. Smeddle to keep it in view. The financial position to October 31 was as follows:—Cash at Industrial Bank, 1200t, 14s, 7d.; specie in transit August, 791, 16s, 1d.; that was on the mine, but not shipped, September, 50t, 10s., 5d., and October, 57, 15s, 1d.; making the total, 2151, 1s, 1d. in transit; manager's balance, 11s, 9s, 1d., and arrears on calls. Their liabilities were borrowed on the property, 2000t. Harvey and Co.



# TWO GRAND MEDALS for PROGRESS AT THE VIENNA EXHIBITION

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ALSO

Two Silver Medals, Highland and Agricultural Society of Scotland, 1873.

Three Silver Medals, Manchester and Liverpool Agricultural Society, 1873.

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Extract from Paper read before the British Association at Bradford, 1873, on Brain's System of Mining and Shafting Sinking at the Drybrook Iron Mines, Forest of Dean, using the "Burleigh" Rock Drilling and Air Compressing Machinery:

(Shaft 10 ft. Diameter.)

### COST OF SHAFT BY MACHINE

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Sinkers, three, 12 days each, at 5s. 9d. . . . .	£10 7 0
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Dynamite, 60 lbs., at 2s. . . . .	6 0 0
Electric Fuses (Brain's) 20 per day, at say 6d. each	6 0 0
Coal for Air Compressing Engine, 12 tons small, at 10s. . . . .	6 0 0
Oil for engines . . . . .	0 5 0
Total . . . . .	£44 4 0

Depth Sunk 3 yards—Cost per yard . . . £15 13s. 4d. Depth Sunk 5 yards—Cost per yard . . . £8 16s. 9d.

THE ABOVE STATEMENT REPRESENTS WHAT IS NOW BEING DONE AT THE ABOVE MINE.

### ADDITIONAL TESTIMONY.

*The Weardale Iron and Coal Company, via Darlington, Sept. 6th, 1873.*

Messrs. T. BROWN & CO., 96, Newgate Street, London, E.C.  
DEAR SIRS.—I have much pleasure in informing you that the Rock Drill and High-pressure Boiler, with which you supplied us, are both working extremely well.

(For the Weardale Iron and Coal Company, Limited),

J. R. CRONE.

(COPY.)

DEAR SIRS.—In reply to yours of 2nd inst., I am sorry I have not time to go into the comparative results of hand labour in sinking with that of the work done by your "Burleigh Drill." All I can say is, that for the last few months it has been giving me every satisfaction, and there is a marked difference in the progress of our sinking operations.

*Crossfield Iron Ore Works, Crossfield Moor Row, via Carnforth, Sept. 8th, 1873.*

I am, yours truly,  
JOHN MAIN.



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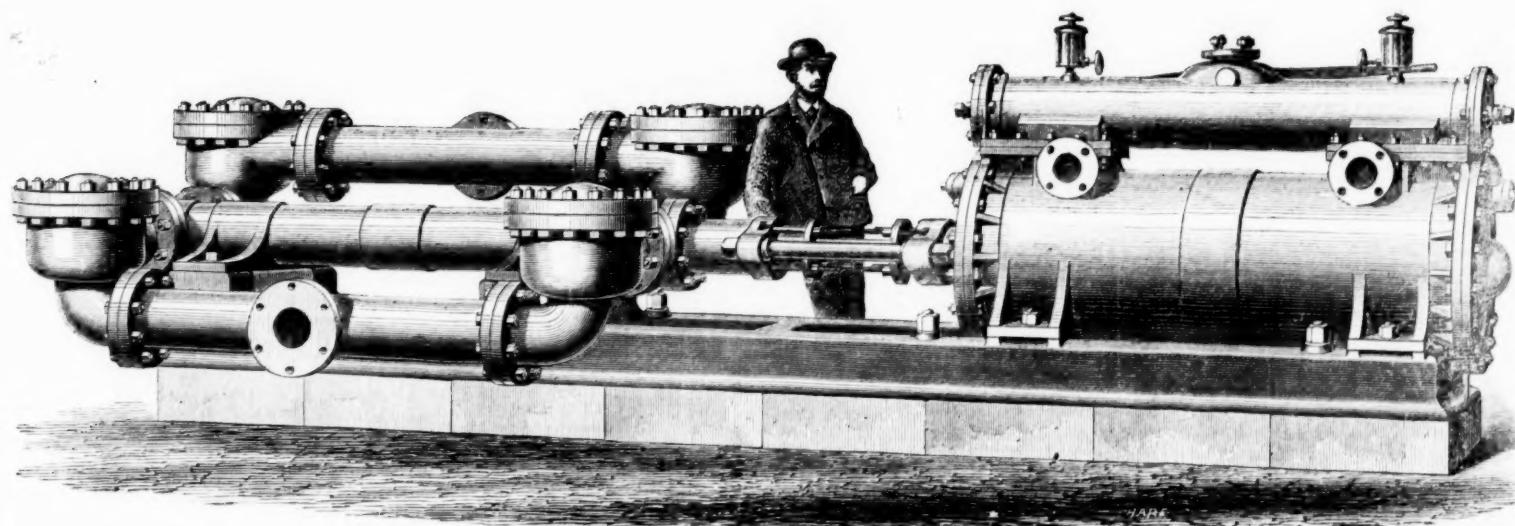
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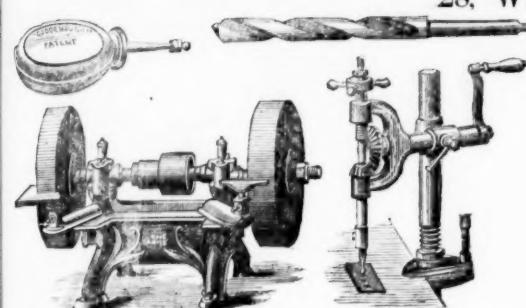
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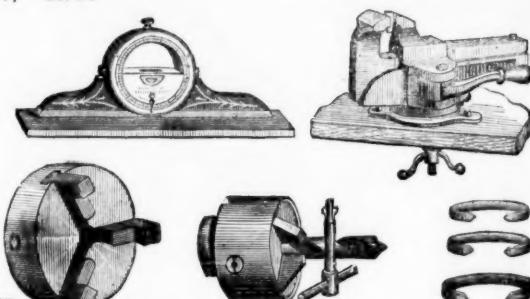


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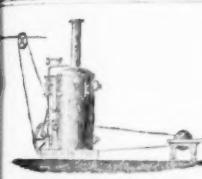


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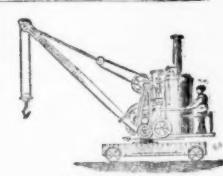
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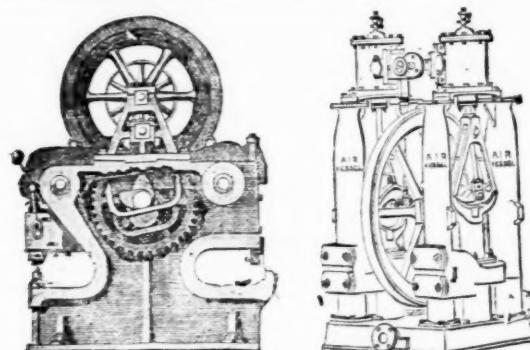
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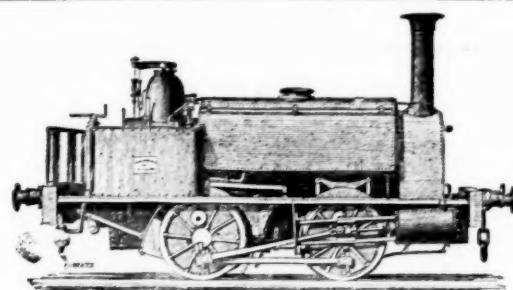
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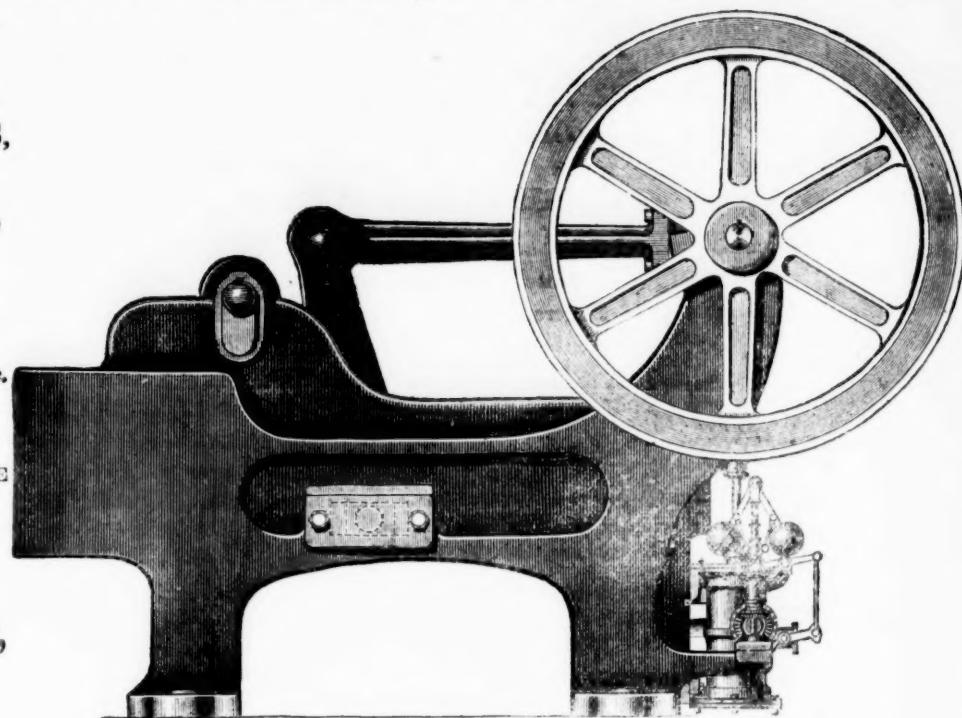
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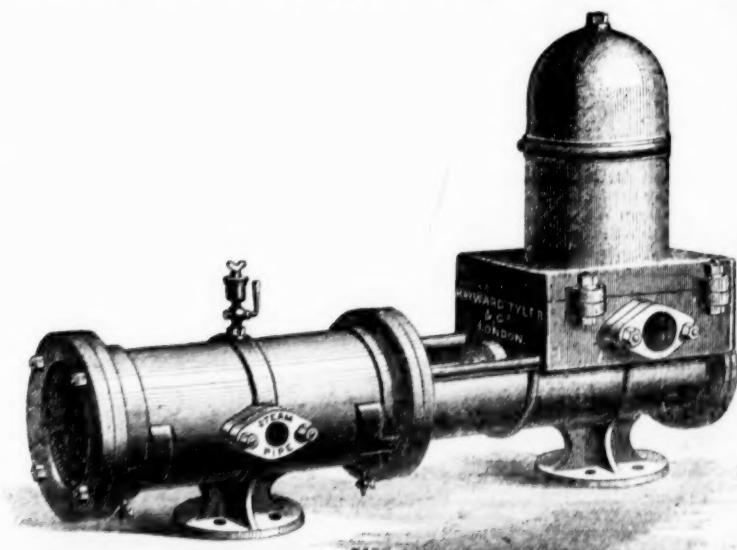
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